[MS-CSS21]:
Internet Explorer Cascading Stylesheets (CSS) 2.1 Standards Support Document

Revision Summary

Date	Revision History	Revision Class	Comments
02/24/2010	0.1	New	Released new document.
03/17/2010	0.2	Minor	Clarified the meaning of the technical content.
03/26/2010	1.0	None	Introduced no new technical or language changes.
05/26/2010	1.2	None	Introduced no new technical or language changes.
09/08/2010	1.3	Major	Significantly changed the technical content.
10/13/2010	1.4	Minor	Clarified the meaning of the technical content.
02/10/2011	2.0	Major	Significantly changed the technical content.
02/28/2011	2.1	Minor	Clarified the meaning of the technical content.
03/23/2011	2.2	Minor	Clarified the meaning of the technical content.

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1 Introduction

This document describes the level of support provided by Windows® Internet Explorer® 7, Windows® Internet Explorer® 8, and Windows® Internet Explorer® 9 for the *Cascading Style Sheets Level 2 Revision 1 (CSS 2.1) Specification* [CSS-Level2-2009], W3C Candidate Recommendation 08 September 2009. CSS is the default style sheet language in Windows® Internet Explorer®.

Appendix B of this document describes the level of support provided for features in *Cascading Style Sheets Level 1* [CSS-Level1-2008] W3C Recommendation 17 Dec 1996, revised 11 Apr 2008. Only requirements that directly conflict with CSS 2.1 features are included.

The [CSS-Level2-2009] and [CSS-Level1-2008] specifications contain guidance for authors of webpages and browser users, in addition to user agents (browser applications). Statements found in this document apply only to normative requirements in the specification targeted to user agents, not those targeted to authors.

1.1 Glossary

MAY, SHOULD, MUST, SHOULD NOT, MUST NOT: These terms (in all caps) are used as described in [RFC2119]. All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

1.2 References

1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact dochelp@microsoft.com. We will assist you in finding the relevant information. Please check the archive site, http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624, as an additional source.

[CSS-Level1-2008] Wium Lie, H., and Bos, B., "Cascading Style Sheets, level 1", W3C Recommendation 17 Dec 1996, Revised 11 Apr 2008, http://www.w3.org/TR/2008/REC-CSS1-20080411/

[CSS-Level2-2009] Bos, B., Celik, T., Hickson, I., and Wium Lie, H., Eds., "Cascading Style Sheets Level 2 Revision 1 (CSS 2.1) Specification", W3C Candidate Recommendation 08 September 2009, http://www.w3.org/TR/2009/CR-CSS2-20090908/

[HTML] World Wide Web Consortium, "HTML 4.01 Specification", December 1999, http://www.w3.org/TR/html4/

[ISO-10646] International Organization for Standardization, "Information Technology - Universal Multiple-Octet Coded Character Set (UCS)", ISO/IEC 10646:2003, December 2003, http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=39921&ICS1

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, http://www.ietf.org/rfc/rfc2119.txt

[RFC3066] Alvestrand, H., "Tags for the Identification of Language", RFC 3066, January 2001, http://www.ietf.org/rfc/rfc3066.txt

[RFC3986] Berners-Lee, T., Fielding, R., and Masinter, L., "Uniform Resource Identifier (URI): Generic Syntax", STD 66, RFC 3986, January 2005, http://www.ietf.org/rfc/rfc3986.txt

[UNICODE] The Unicode Consortium, "Unicode Home Page", 2006, http://www.unicode.org/

[UNICODE-A29] Davis, M., "Unicode Text Segmentation", 2009-09-24, http://www.unicode.org/reports/tr29/

1.2.2 Informative References

[MSDN-HasLayout] Microsoft Corporation, "HasLayout Overview", August 2005, http://msdn.microsoft.com/en-us/library/bb250481(VS.85).aspx

[MS-IEDOCO] Microsoft Corporation, "Internet Explorer Web Standards Documentation Overview", February 2010.

[W3C-CSS2.1-StyleIndex] W3C, "Index of /Style/CSS/Test/CSS2.1/20061011", http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/

[W3C-CSS2.1-TestSuite-20101210] CSS Working Group, "CSS2.1 Conformance Test Suite", Release Candidate version of the CSS2.1 Test Suite, http://test.csswg.org/suites/css2.1/20101210/

1.3 Microsoft Implementations

The following Microsoft products implement some portion of the CSS specification:

- Windows® Internet Explorer® 7
- Windows® Internet Explorer® 8
- Windows® Internet Explorer® 9

In addition, each version of Windows® Internet Explorer® implements multiple document modes, which can vary individually in their support of the standard. The following table lists the document modes available in each version of Internet Explorer.

Browser Version	Document Modes Supported
Internet Explorer 7	Quirks Mode Standards Mode
Internet Explorer 8	Quirks Mode IE7 Mode IE8 Mode
Internet Explorer 9	Quirks Mode IE7 Mode IE8 Mode IE9 Mode

Throughout this document, the document mode appears first followed by the browser version in parentheses. Only those document modes and versions of Internet Explorer for which there is a variation note will be listed. If the document mode is not listed, conformance to the specification can be assumed.

Note "Standards mode" in Internet Explorer 7 and "IE7 mode" in Internet Explorer 8 refer to the same document mode. "IE7 mode" is the preferred way of referring to this document mode across all versions of the browser. In addition, "IE5 mode" and "Quirks mode" refer to the same document mode in Internet Explorer 9.

1.4 Standards Support Requirements

To conform to [CSS-Level1-2008] or [CSS-Level2-2009], a user agent must implement all required portions of the specification. Any optional portions that have been implemented must also be implemented as described by the specification. Normative language is usually used to define both required and optional portions. (For more information, see [RFC2119].)

The following table lists the sections of [CSS-Level1-2008] and whether they are considered normative or informative.

Sections	Normative/Informative
1-7	Normative
8-9	Informative
Appendix A	Informative
Appendix B	Normative
Appendices C-F	Informative

The following table lists the sections of [CSS-Level2-2009] and whether they are considered normative or informative.

Sections	Normative/Informative
1-2	Informative
3-18	Normative
Appendices A-D	Informative
Appendix E	Normative
Appendix F	Informative
Appendix G	Normative

1.5 Notation

The following notations are used in this document to differentiate between notes of clarification, variation from the specification, and extension points.

Notation	Explanation
C####	Identifies a clarification of ambiguity in the target specification. This includes imprecise statements, omitted information, discrepancies, and errata. This does not include data formatting clarifications.
V####	Identifies an intended point of variability in the target specification such as the use of MAY, SHOULD, or RECOMMENDED. (See [RFC2119].) This does not include extensibility points.

Notation	Explanation
E####	Identifies extensibility points (such as optional implementation-specific data) in the target specification, which can impair interoperability.

For document mode and browser version notation, see section 1.3.

2 Standards Support Statements

This section contains a full list of variations, clarifications, and extension points in the Microsoft implementation of [CSS-Level2-2009].

- Section 2.1 includes only those variations that violate a MUST requirement in the target specification.
- Section 2.2 describes further variations from MAY and SHOULD requirements.
- Section 2.3 identifies variations in error handling.
- Section 2.4 identifies variations that impact security.

Section 4, Appendix B, of this document describes variations from requirements in *Cascading Style Sheets, level 1* [CSS-Level1-2008] (revised April 11, 2008) that are not in agreement with CSS 2.1 requirements.

2.1 Normative Variations

The following subsections detail the normative variations from MUST requirements in [CSS-Level2-2009].

2.1.1 [CSS-Level2-2009] Section 4.1.2, Keywords

V0001:

The specification states:

```
Keywords have the form of identifiers. Keywords must not be placed between quotes
("..." or '...').
```

Quirks Mode (All Versions)

Quoted keywords are not ignored.

2.1.2 [CSS-Level2-2009] Section 4.1.3, Characters and case

V0002:

The specification states:

```
Note: Backslash escapes, where allowed, are always considered to be part of an
identifier or a string (i.e., "\7B" is not punctuation, even though "{" is, and
"\32" is allowed at the start of a class name, even though "2" is not). The
identifier "te\st" is exactly the same identifier as "test".Escaped characters are
treated as normal characters.
```

All Document Modes (All Versions)

Backslash escapes are not processed when specifying the url() function name. For example, u\75l('myimage.png') does not resolve to url('myimage.png').

2.1.3 [CSS-Level2-2009] Section 4.1.5, At-rules

V0003:

The specification states:

```
CSS 2.1 user agents must ignore any '@import' rule that occurs inside a block or
after any non-ignored statement other than an @charset or an @import rule.
```

Quirks Mode (All Versions)

The **@import** rule is not ignored if it follows any valid statement except **@charset**.

Quirks Mode and IE7 Mode (All Versions)

The **@import** rule is not ignored if it is contained within a block.

IE7 Mode (All Versions)

The **@import** rule is ignored after a bad selector, when it should be parsed and executed.

2.1.4 [CSS-Level2-2009] Section 4.2, Rules for handling parsing errors

V0004:

The specification states:

```
Illegal values:
User agents must ignore a declaration with an illegal value.
```

Quirks Mode (All Versions)

Short-hand properties that contain illegal values are not ignored.

2.1.5 [CSS-Level2-2009] Section 4.3.1, Integers and real numbers

V0005:

The specification states:

```
Some value types may have integer values (denoted by <integer>) or real number
values (denoted by <number>). Real numbers and integers are specified in decimal
notation only. An <integer> consists of one or more digits "0" to "9". A <number>
can either be an <integer>, or it can be zero or more digits followed by a dot (.)
followed by one or more digits. Both integers and real numbers may be preceded by a
"-" or "+" to indicate the sign. -0 is equivalent to 0 and is not a negative
number.
```

Quirks Mode (All Versions)

A <number> that has no digits following the dot (.) is allowed. For example, "10.em" is correctly parsed.

2.1.6 [CSS-Level2-2009] Section 4.3.2, Lengths

V0006:

The specification states:

```
The format of a length value (denoted by <length> in this specification) is a
<number> (with or without a decimal point) immediately followed by a unit
identifier (e.g., px, em, etc.). After a zero length, the unit identifier is
optional.
```

Quirks Mode and IE7 Mode (All Versions)

Lengths can be specified in scientific notation; for example, ‘5e2px’ instead of ‘500px’.

Quirks Mode (All Versions)

Spaces are allowed between `<number>` and the unit identifier.

2.1.7 [CSS-Level2-2009] Section 4.3.3, Percentages

V0007:

The specification states:

```
The format of a percentage value (denoted by <percentage> in this specification) is
a <number> immediately followed by '%'.
```

Quirks Mode and IE7 Mode (All Versions)

Percentages can be specified in scientific notation; for example, '5e2px' instead of '500px'.

2.1.8 [CSS-Level2-2009] Section 4.3.4, URLs and URIs

C0029:

The specification states:

```
In order to create modular style sheets that are not dependent on the absolute location of a
resource, authors may use relative URIs. Relative URIs (as defined in [RFC3986]) are resolved
to full URIs using a base URI. RFC 3986, section 5, defines the normative algorithm for this
process. For CSS style sheets, the base URI is that of the style sheet, not that of the
source document.
```

All Document Modes (All Versions)

Cursor resource paths are relative to the path of document the rule is applied to, not that of the style sheet.

2.1.9 [CSS-Level2-2009] Section 4.4, CSS style representation

V0008:

The specification states:

```
When a style sheet resides in a separate file, user agents must observe the
following priorities when determining a style sheet's character encoding (from
highest priority to lowest):

1. An HTTP "charset" parameter in a "Content-Type" field (or similar parameters in
other protocols)
2. BOM and/or @charset (see below)
3. <link charset=""> or other metadata from the linking mechanism (if any)
4. charset of referring style sheet or document (if any)
5. Assume UTF-8
```

Quirks Mode and IE7 Mode (All Versions)

The priorities are identical, but they follow a different sequence:

1. BOM and/or **@charset**
2. Charset of referring style sheet or document (if any)
3. <link charset=""> or other metadata from the linking mechanism (if any) – the **Link charset** attribute does not override the referring document's codepage
4. An HTTP "charset" parameter in a "Content-Type" field (or similar parameters in other protocols) – the HTTP charset does not override anything but the default
5. Assume UTF-8

All Document Modes (All Versions)

An external style sheet is not abandoned when it starts with a Unicode byte order mark (for example, EF BB BF) and a conflicting ISO **@charset** declaration. Instead, the style sheet is parsed based on the **@charset** declaration.

The **charset** attribute on a **link** element is ignored.

V0009:

The specification states:

```
If the encoding is detected based on one of the entries in the table above marked
"as specified", the user agent ignores the style sheet if it does not parse an
appropriate @charset rule at the beginning of the stream of characters resulting
from decoding in the chosen @charset. This ensures that: -@charset rules should
only function if they are in the encoding of the style sheet,-byte order marks are
ignored only in encodings that support a byte order mark, and-encoding names cannot
contain newlines.
```

Quirks Mode and IE7 Mode (All Versions)

UTF-16BE and UTF-16LE are not properly supported, but the style sheet is not ignored. Instead, unknown UTF-16BE/LE encodings are converted to UTF-16 and then interpreted as UTF-16.

2.1.10 [CSS-Level2-2009] Section 5.7, Adjacent sibling selectors

V0010:

The specification states:

```
Adjacent sibling selectors have the following syntax: E1 + E2, where E2 is the
subject of the selector. The selector matches if E1 and E2 share the same parent in
the document tree and E1 immediately precedes E2, ignoring non-element nodes (such
as text nodes and comments).
```

Quirks Mode (All Versions)

The adjacent sibling selector is not supported; therefore, styling based on this selector is not supported.

IE7 Mode (All Versions)

Comments are not ignored for adjacent sibling selectors.

2.1.11 [CSS-Level2-2009] Section 5.8.1, Matching attributes and attribute values

V0011:

The specification states:

```
Attribute selectors may match in four ways:

[att]
Match when the element sets the "att" attribute, whatever the value of the
attribute.

[att=val]
Match when the element's "att" attribute value is exactly "val".

[att~=val]
Represents an element with the att attribute whose value is a white space-separated
list of words, one of which is exactly "val". If "val" contains white space, it
will never represent anything (since the words are separated by spaces). If "val"
is the empty string, it will never represent anything either.

[att|=val]
Represents an element with the att attribute, its value either being exactly "val"
or beginning with "val" immediately followed by "-" (U+002D). This is primarily
intended to allow language subcode matches (e.g., the hreflang attribute on the a
element in HTML) as described in RFC 3066 ([RFC3066]) or its successor. For lang
(or xml:lang) language subcode matching, please see the :lang pseudo-class.
```

Quirks Mode (All Versions)

Attribute selectors are not supported.

V0012:

The specification states:

```
Attribute values must be identifiers or strings. The case-sensitivity of attribute
names and values in selectors depends on the document language.
```

Quirks Mode (All Versions)

Attribute selectors are not supported.

V0013:

The specification states:

```
Multiple attribute selectors can be used to refer to several attributes of an
element, or even several times to the same attribute.
```

Quirks Mode (All Versions)

Attribute selectors are not supported.

2.1.12 [CSS-Level2-2009] Section 5.9, ID selectors

V0014:

The specification states:

```
If an element has multiple ID attributes, all of them must be treated as IDs for
that element for the purposes of the ID selector.
```

All Document Modes (All Versions)

Multiple ID attributes are not supported.

2.1.13 [CSS-Level2-2009] Section 5.11.1, :first-child pseudo-class

V0015:

The specification states:

```
The :first-child pseudo-class matches an element that is the first child element of
some other element.
```

Quirks Mode (All Versions)

The **:first-child** pseudo class is not supported.

2.1.14 [CSS-Level2-2009] Section 5.11.2, The link pseudo-classes: :link and :visited

V0016:

The specification states:

```
User agents commonly display unvisited links differently from previously visited
ones. CSS provides the pseudo-classes ':link' and ':visited' to distinguish them:

The :link pseudo-class applies for links that have not yet been visited.
The :visited pseudo-class applies once the link has been visited by the user.
```

```
The two states are mutually exclusive.
```

Quirks Mode and IE7 Mode (All Versions)

The **:link** pseudo-class and the **:visited** pseudo-class are not mutually exclusive.

2.1.15 [CSS-Level2-2009] Section 5.11.4, The language pseudo-class: :lang

V0017:

The specification states:

```
The pseudo-class ':lang(C)' matches if the element is in language C. Whether there
is a match is based solely on the identifier C being either equal to, or a hyphen-
separated substring of, the element's language value, in the same way as if
performed by the '|=' operator. The matching of C against the element's language
value is performed case-insensitively. The identifier C does not have to be a valid
language name.

C must not be empty.
```

Quirks Mode and IE7 Mode (All Versions)

The pseudo-class **:lang** is not supported.

2.1.16 [CSS-Level2-2009] Section 5.12.1, The :first-line pseudo-element

V0018:

The specification states:

```
The "first formatted line" of an element may occur inside a block-level descendant
in the same flow (i.e., a block-level descendant that is not positioned and not a
float). E.g., the first line of the DIV in <DIV><P>This line...</P></DIV> is the
first line of the P (assuming that both P and DIV are block-level).
```

Quirks Mode and IE7 Mode (All Versions)

The first line does not match when the first line of the element belongs to a block-level descendant of the element.

IE8 Mode (All Versions)

If the first line of an inline-block matches **:first-line**, all the lines of the inline-block also match **:first-line**.

All Document Modes (All Versions)

Elements contained within a parent of a **:first-line** pseudo-element incorrectly inherit from the parent element instead of the **:first-line** pseudo-element.

V0019:

The specification states:

```
The first line of a table-cell or inline-block cannot be the first formatted line
of an ancestor element. Thus, in <DIV><P STYLE="display: inline-block">Hello<BR>
Goodbye</P> etcetera</DIV> the first formatted line of the DIV is not the line
"Hello".
```

Quirks Mode and IE7 Mode (All Versions)

The **:first-line** pseudo-element is not supported for the first line of an inline-block.

IE8 Mode and IE9 Mode (All Versions)

:first-line incorrectly applies to inline-block children of a block parent; moreover, the **:first-line** style is applied to the entire content of the inline-block child.

2.1.17 [CSS-Level2-2009] Section 5.12.2, The :first-letter pseudo-element

V0020:

The specification states:

```
These are the properties that apply to :first-letter pseudo-elements: font
properties, 'text-decoration', 'text-transform', 'letter-spacing', 'word-spacing'
(when appropriate), 'line-height', 'float', 'vertical-align' (only if 'float' is
'none'), margin properties, padding properties, border properties, color property,
background properties. UAs may apply other properties as well. To allow UAs to
render a typographically correct drop cap or initial cap, the UA may choose a line-
height, width and height based on the shape of the letter, unlike for normal
elements. CSS3 is expected to have specific properties that apply to first-letter.
```

Quirks Mode and IE7 Mode (All Versions)

The **float**, **letter-spacing**, **padding**, and **line-height** properties are not supported.

IE7 Mode (All Versions)

The **border** property is applied to the bottom border; the bottom border is clipped at the content edge.

All Document Modes (All Versions)

:first-letter when used in combination with **float** and **text-transform: capitalize** causes the second letter to become capitalized.

V0021:

The specification states:

```
Punctuation (i.e, characters defined in Unicode [UNICODE] in the "open" (Ps),
"close" (Pe), "initial" (Pi). "final" (Pf) and "other" (Po) punctuation classes),
that precedes or follows the first letter should be included.
```

Quirks Mode and IE7 Mode (All Versions)

Punctuation characters defined in Unicode that precede or follow the first letter are not included.

V0022:

The specification states:

```
Some languages may have specific rules about how to treat certain letter
combinations. In Dutch, for example, if the letter combination "ij" appears at the
beginning of a word, both letters should be considered within the :first-letter
pseudo-element.
```

All Document Modes (All Versions)

Letter combinations are not considered for the purpose of **:first-letter** pseudo-element matching.

2.1.18 [CSS-Level2-2009] Section 5.12.3, The :before and :after pseudo-elements

V0023:

The specification states:

```
The ':before' and ':after' pseudo-elements can be used to insert generated content
before or after an element's content.
```

Quirks Mode and IE7 Mode (All Versions)

The **:before** and **:after** pseudo-elements are not supported.

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

The **:before** and **:after** pseudo-elements have no effect on **link** elements.

2.1.19 [CSS-Level2-2009] Section 6.2.1, The 'inherit' value

V0024:

The specification states:

```
Each property may also have a specified value of 'inherit', which means that, for a
given element, the property takes the same computed value as the property for the
element's parent. The 'inherit' value can be used to strengthen inherited values,
and it can also be used on properties that are not normally inherited.
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value is supported only for the **visibility** and the **direction** properties.

All Document Modes (All Versions)

The **inherit** keyword does not inherit computed values from parent elements.

The **inherit** keyword does not inherit from a style that has been dynamically changed.

2.1.20 [CSS-Level2-2009] Section 6.3, The @import rule

V0025:

The specification states:

```
The '@import' rule allows users to import style rules from other style sheets. In
CSS 2.1, any @import rules must precede all other rules (except the @charset rule,
if present). See the section on parsing for when user agents must ignore @import
rules. The '@import' keyword must be followed by the URI of the style sheet to
include. A string is also allowed; it will be interpreted as if it had url(...)
around it.
```

Quirks Mode (All Versions)

The **@import** rule is not ignored if it does not precede all other rules (except the **@charset** rule, if present).

All Document Modes (All Versions)

@import rules are applied only from style sheets that are linked three levels deep.

V0026:

The specification states:

```
A target medium matches a media list if one of the items in the media list is the
target medium or 'all'.
```

Quirks Mode and IE7 Mode (All Versions)

The target medium must match one of the items in the media list. The `all` specifier is not supported.

2.1.21 [CSS-Level2-2009] Section 6.4.3, Calculating a selector's specificity

V0027:

The specification states:

```
A selector's specificity is calculated as follows:

count 1 if the declaration is from is a 'style' attribute rather than a rule with a
selector, 0 otherwise (= a) (In HTML, values of an element's "style" attribute are
style sheet rules. These rules have no selectors, so a=1, b=0, c=0, and d=0.)
count the number of ID attributes in the selector (= b)
count the number of other attributes and pseudo-classes in the selector (= c)
count the number of element names and pseudo-elements in the selector (= d)
```

Quirks Mode (All Versions)

The following selectors and selector features are not supported:

- All attribute selectors
- Adjacent sibling and sibling combinators
- The **:active**, **:first-child**, **:focus**, and **:lang** pseudo-classes

- The **:after**, **:before**, **:first-letter**, and **:first-line** pseudo-elements
- **@page :first**, **@page :left**, and **@page :right**

The rules are not applied and the selector specificity is zero.

IE7 Mode (All Versions)

The specificity of a selector that ends with a pseudo-element is capped at two no matter how many parent elements precede it.

2.1.22 [CSS-Level2-2009] Section 6.4.4, Precedence of non-CSS presentational hints

V0028:

The specification states:

```
The UA may choose to honor presentational attributes in an HTML source document. If
so, these attributes are translated to the corresponding CSS rules with specificity
equal to 0, and are treated as if they were inserted at the start of the author
style sheet. They may therefore be overridden by subsequent style sheet rules. In a
transition phase, this policy will make it easier for stylistic attributes to
coexist with style sheets.
```

Quirks Mode and IE7 Mode (All Versions)

The **cellspacing**, **frame**, **rules**, **framebar**, **hspace**, and **vspace** attributes are not overridden by subsequent style sheet rules.

IE8 Mode and IE9 Mode (All Versions)

The **noshade** attribute is not overridden by subsequent style sheet rules.

2.1.23 [CSS-Level2-2009] Section 7.2.1, The @media rule

V0029:

The specification states:

```
Style rules outside of @media rules apply to all media types that the style sheet
applies to. At-rules inside @media are invalid in CSS2.1.
```

Quirks Mode and IE7 Mode (All Versions)

At-rules inside the **@media** rule are not ignored. For example, if an **@media** appears inside an **@media** rule, the declarations within are applied to the document.

2.1.24 [CSS-Level2-2009] Section 7.3, Recognized media types

V0030:

The specification states:

```
Media type names are case-insensitive.
```

Quirks Mode and IE7 Mode (All Versions)

Media type names are case-sensitive.

V0031:

The specification states:

```
@media and @import rules with unknown media types are treated as if the unknown
media types are not present.
```

Quirks Mode and IE7 Mode (All Versions)

The **@import** rule does not ignore unknown media types. In the case of an unknown media type, the **@import** rules fail.

2.1.25 [CSS-Level2-2009] Section 8.1, Box dimensions

V0032:

The specification states:

```
content edge or inner edge

The content edge surrounds the rectangle given by the width and height of the box,
which often depend on the element's rendered content. The four content edges define
the box's content box.
```

Quirks Mode (All Versions)

The content edge surrounds content, padding, and border.

V0033:

The specification states:

```
padding edge

The padding edge surrounds the box padding. If the padding has 0 width, the padding
edge is the same as the content edge. The four padding edges define the box's
padding box.
```

Quirks Mode (All Versions)

The content edge surrounds content, padding, and border.

V0034:

The specification states:

```
border edge
```

```
The border edge surrounds the box's border. If the border has 0 width, the border
edge is the same as the padding edge. The four border edges define the box's border
box.
```

Quirks Mode (All Versions)

The border edge is equal to the content box. The width of the border is subtracted from the area available for content and padding.

2.1.26 [CSS-Level2-2009] Section 8.3, Margin properties: 'margin-top', 'margin-right', 'margin-bottom', 'margin-left', and 'margin'

V0035:

The specification states:

```
'margin-top', 'margin-bottom'

Value:                <margin-width> | inherit
Initial:              0
Applies to:           all elements except elements with table display types other
than table-caption, table and inline-table
Inherited:            no
Percentages:          refer to width of containing block
Media:                visual
Computed value:       the percentage as specified or the absolute length

These properties have no effect on non-replaced inline elements.
```

Quirks Mode and IE7 Mode (All Versions)

The **margin-top** and the **margin-bottom** properties are not ignored when applied to elements with the following table display types:

- `table-cell`
- `table-row-group`
- `table-column-group`
- `table-header-group`
- `table-footer-group`
- `table-row`
- `table-column`

IE8 Mode (All Versions)

When a parent element has a percentage-based **padding** value specified (for example, `padding-top: 10%`) and a child element has a vertical margin specified (for example, `margin-top:100px`), the vertical margin is ignored by the child element and then applied to the parent element instead.

All Document Modes (All Versions)

The width of shrink-to-fit elements is incorrect when children elements have width and horizontal percentage-based margins.

Content outside the page box is discarded when negative margins are used.

V0036:

The specification states:

```
'margin-right', 'margin-left'

Value:                  <margin-width> | inherit
Initial:                0
Applies to:             all elements except elements with table display types other
than table-caption, table and inline-table
Inherited:              no
Percentages:            refer to width of containing block
Media:                  visual
Computed value:         the percentage as specified or the absolute length

These properties set the top, right, bottom, and left margin of a box.
```

Quirks Mode and IE7 Mode (All Versions)

The **margin-left** property is not ignored when it is applied to elements with the following table display types:

- `table-cell`
- `table-row-group`
- `table-header-group`
- `table-footer-group`
- `table-row`

The **margin-right** property is not ignored when it is applied to elements with the following table display types:

- `table-cell`
- `table-column`
- `table-header-group`
- `table-column-group`
- `table-row-group`

Quirks Mode (All Versions)

When the **margin-left** and **margin-right** properties are set to `auto`, the element will not center.

V0037:

The specification states:

```
'margin'

Value:                  <margin-width>{1,4} | inherit
Initial:                see individual properties
Applies to:             all elements except elements with table display types other
than table-caption, table and inline-table
Inherited:              no
Percentages:            refer to width of containing block
Media:                  visual
Computed value:         see individual properties
```

Quirks Mode and IE7 Mode (All Versions)

The **margin** property is not ignored when it is applied to elements with the following table display types:

- `table-cell`
- `table-row-group`
- `table-column-group`
- `table-header-group`
- `table-footer-group`
- `table-row`
- `table-column`

2.1.27 [CSS-Level2-2009] Section 8.3.1, Collapsing margins

V0038:

The specification states:

```
If the top and bottom margins of a box are adjoining, then it is possible for
margins to collapse through it. In this case, the position of the element depends
on its relationship with the other elements whose margins are being collapsed.
```

Quirks Mode and IE7 Mode (All Versions)

If the top and bottom margins of a box are adjoining, the box prevents margins from collapsing through it.

Note In Internet Explorer 7, parent elements that have "layout" can cause child elements to collapse margins and padding incorrectly. An element that sets **hasLayout** is responsible for sizing and arranging its own content. For more information, see [MSDN-HasLayout].

All Document Modes (All Versions)

Table and caption margins do not collapse when the table's parent is floated.

V0039:

The specification states:

```
If the element's margins are collapsed with its parent's top margin, the top border
edge of the box is defined to be the same as the parent's.
```

Quirks Mode (All Versions)

The top margin of an element is not collapsed with its parent's top margin.

IE7 Mode (All Versions)

Margin collapsing is prevented when one of the following conditions is true:

- The element has a specified width and/or height
- The element is an inline-block
- The element is absolutely positioned
- The element is a float
- The element is a table
- The element is transformed – e.g. style = "zoom:1"

Note In Internet Explorer 7, any of the preceding conditions will cause an element to gain "layout." An element that sets **hasLayout** is responsible for sizing and arranging its own content. For more information, see [MSDN-HasLayout].

V0040:

The specification states:

```
Note that the positions of elements that have been collapsed through have no effect
on the positions of the other elements with whose margins they are being collapsed;
the top border edge position is only required for laying out descendants of these
elements.
```

Quirks Mode (All Versions)

The top margin of an element is not collapsed with the top margin of its parent.

IE7 Mode (All Versions)

Margin collapsing is prevented when one of the following conditions is true:

- The element has a specified width and/or height
- The element is an inline-block
- The element is absolutely positioned
- The element is a float
- The element is a table
- The element is transformed; for example, zoom:1

V0041:

The specification states:

```
The bottom margin of an in-flow block-level element is always adjoining to the top
margin of its next in-flow block-level sibling, unless that sibling has clearance.
```

Quirks Mode and IE7 Mode (All Versions)

Clearance is evaluated and applied before the margins are collapsed.

2.1.28 [CSS-Level2-2009] Section 8.4, Padding properties: 'padding-top', 'padding-right', 'padding-bottom', 'padding-left', and 'padding'

V0042:

The specification states:

```
 'padding'

Value:                <padding-width>{1,4} | inherit
Initial:              see individual properties
Applies to:           all elements except table-row-group, table-header-group,
table-footer-group, table-row, table-column-group and table-column
Inherited:            no
Percentages:          refer to width of containing block
Media:                visual
Computed value:       see individual properties
```

Quirks Mode and IE7 Mode (All Versions)

The **padding** property is not ignored when it is applied to elements with the following table display types:

- `table-row-group`
- `table-header-group`
- `table-footer-group`
- `table-row`
- `table-column-group`
- `table-column`

Quirks Mode and IE7 Mode (All Versions)

A block child element of an inline element incorrectly inherits the background and border of its parent.

IE8 Mode (All Versions)

When a parent element has a percentage-based **padding** value specified (for example, `padding-top: 10%`) and a child element has a vertical margin specified (for example, `margin-top:100px`), the vertical margin is ignored by the child element and then applied to the parent element instead.

Inline element padding is lost after a line break.

2.1.29 [CSS-Level2-2009] Section 8.5.1, Border width: 'border-top-width', 'border-right-width', 'border-bottom-width', 'border-left-width', and 'border-width'

V0043:

The specification states:

```
'border-width'

Value:                <border-width>{1,4} | inherit
Initial:              see individual properties
Applies to:           all elements
Inherited:            no
Percentages:          N/A
Media:                visual
Computed value:       see individual properties
```

Quirks Mode (All Versions)

The **border-width** property is not applied to the bottom border of elements that are specified with a **display** type of `inline`.

Quirks Mode and IE7 Mode (All Versions)

When a **border-width** property has an invalid unit identifier, the value is converted to pixels instead of being ignored and is assigned a value of `medium`.

IE7 Mode (All Versions)

The **border-width** property is applied to the bottom border; the bottom border is clipped at the content edge.

2.1.30 [CSS-Level2-2009] Section 8.5.2, Border color: 'border-top-color', 'border-right-color', 'border-bottom-color', 'border-left-color', and 'border-color'

V0044:

The specification states:

```
'border-color'

Value:                [ <color> | transparent ] {1,4} | inherit
Initial:              see individual properties
Applies to:           all elements
Inherited:            no
Percentages:          N/A
Media:                visual
Computed value:       see individual properties
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **border-color** property is not supported.

V0340:

The specification states:

```
If an element's border color is not specified with a border property, user agents must use
the value of the element's 'color' property as the computed value for the border color.
```

IE7 Mode (All Versions)

If an element's border color is not specified with a **border** property, the color is set from a previous **border-color** value rather than the text color.

2.1.31 [CSS-Level2-2009] Section 8.5.3, Border style: 'border-top-style', 'border-right-style', 'border-bottom-style', 'border-left-style', and 'border-style'

V0045:

The specification states:

```
'border-top-style', 'border-right-style', 'border-bottom-style', 'border-left-
style'

Value:                  <border-style> | inherit
Initial:                none
Applies to:             all elements
Inherited:              no
Percentages:            N/A
Media:                  visual
Computed value:         as specified

All borders are drawn on top of the box's background.
```

Quirks Mode and IE7 Mode (All Versions)

The **border-left-style** and **border-right-style** properties of the `table-column` and `table-column-group` table display types are not supported.

IE7 Mode (All Versions)

The bottom border of a `display:inline` element is cut off at the content baseline.

V0046:

The specification states:

```
'border-style'

Value:                  <border-style> {1,4} | inherit
Initial:                see individual properties
Applies to:             all elements
Inherited:              no
Percentages:            N/A
Media:                  visual
Computed value:         see individual properties
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **border-style** property is not supported.

2.1.32 [CSS-Level2-2009] Section 8.5.4, Border shorthand properties: 'border-top', 'border-right', 'border-bottom', 'border-left', and 'border'

V0047:

The specification states:

```
'border-top', 'border-right', 'border-bottom', 'border-left'

Value:                  [ <border-width> || <border-style> || <'border-top-color'>
] | inherit
Initial:                see individual properties
Applies to:             all elements
Inherited:              no
Percentages:            N/A
Media:                  visual
Computed value:         see individual properties

This is a shorthand property for setting the width, style, and color of the top,
right, bottom, and left border of a box.
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **border-top**, **border-right**, **border-bottom**, and **border-left** properties is not supported.

V0048:

The specification states:

```
'border'

Value:                  [ <border-width> || <border-style> || <'border-top-color'>
] | inherit
Initial:                see individual properties
Applies to:             all elements
Inherited:              no
Percentages:            N/A
Media:                  visual
Computed value:         see individual properties
```

IE7 Mode (All Versions)

The bottom border of an inline element is cut off below the baseline.

2.1.33 [CSS-Level2-2009] Section 9.10, Text direction: the 'direction' and 'unicode-bidi' properties

V0049:

The specification states:

```
'direction' Value: ltr | rtl | inherit
```

```
Initial: ltr
Applies to: all elements, but see prose
Inherited: yes
Percentages: N/A
Media: visual
Computed value: as specified
This property specifies the base writing direction of blocks and the direction of embeddings
and overrides (see 'unicode-bidi') for the Unicode bidirectional algorithm. In addition, it
specifies the direction of table column layout, the direction of horizontal overflow, and the
position of an incomplete last line in a block in case of 'text-align: justify'.
 Values for this property have the following meanings:
 ltr Left-to-right direction. rtl Right-to-left direction. For the 'direction' property to
affect reordering in inline elements, the 'unicode-bidi' property's value must be 'embed' or
'override'.
 Note. The 'direction' property, when specified for table column elements, is not inherited
by cells in the column since columns are not the ancestors of the cells in the document tree.
Thus, CSS cannot easily capture the "dir" attribute inheritance rules described in [HTML4],
section 11.3.2.1.


'unicode-bidi'

Value:                  normal | embed | bidi-override | inherit
Initial:                normal
Applies to:             all elements, but see prose
Inherited:              no
Percentages:            N/A
Media:                  visual
Computed value:         as specified
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **unicode-bidi** property is not supported.

All Document Modes (All Versions)

Positioning of absolutely positioned non-replaced elements do not align correctly when the **direction** property is set to `rtl` (right to left) and margins left/right are set to auto.

Positioning of absolutely positioned replaced elements do not align correctly when the **direction** property is set to `rtl` (right to left) and margins left/right are set to auto.

Alignment of child inline elements is incorrect when the parent and child are specified with different directions.

Borders are not placed on the correct side when an element has its **direction** property set to `rtl`.

2.1.34 [CSS-Level2-2009] Section 9.2.1.1, Anonymous block boxes

V0050:

The specification states:

```
When an inline box contains a block box, the inline box (and its inline ancestors
within the same line box) are broken around the block. The line boxes before the
break and after the break are enclosed in anonymous boxes, and the block box
becomes a sibling of those anonymous boxes. When such an inline box is affected by
```

```
relative positioning, the relative positioning also affects the block box.
```

Quirks Mode and IE7 Mode (All Versions)

The inline box is not broken around the contained block.

V0051:

The specification states:

```
Some user agents have implemented borders on inlines containing blocks in other
ways, e.g., by wrapping such nested blocks inside "anonymous line boxes" and thus
drawing inline borders around such boxes. As CSS1 and CSS2 did not define this
behavior, CSS1-only and CSS2-only user agents may implement this alternative model
and still claim conformance to this part of CSS 2.1. This does not apply to UAs
developed after this specification was released.
```

Quirks Mode and IE7 Mode (All Versions)

Borders are rendered by wrapping blocks contained in inline boxes inside "anonymous line boxes" so that inline borders are drawn around the inline boxes.

2.1.35 [CSS-Level2-2009] Section 9.2.3, Run-in boxes

V0052:

The specification states:

```
A run-in box behaves as follows:

1. If the run-in box contains a block box, the run-in box becomes a block box.
2. If a sibling block box (that does not float and is not absolutely positioned)
follows the run-in box, the run-in box becomes the first inline box of the block
box. A run-in cannot run in to a block that already starts with a run-in or that
itself is a run-in.
3. Otherwise, the run-in box becomes a block box.
```

Quirks Mode and IE7 Mode (All Versions)

The `run-in` value for the **display** property is not supported.

IE8 Mode (Internet Explorer 8)

When a **display:run-in** element runs into a **direction:rtl** element, the content of both elements is reversed.

2.1.36 [CSS-Level2-2009] Section 9.2.4, The 'display' property

V0053:

The specification states:

```
'display'
```

```
Value:                  inline | block | list-item | run-in | inline-block | table
| inline-table | table-row-group | table-header-group | table-footer-group | table-
row | table-column-group | table-column | table-cell | table-caption | none |
inherit
Initial:                inline
Applies to:             all elements
Inherited:              no
Percentages:            N/A
Media:                  all
Computed value:         see text
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **display** property is not supported.

The `run-in` value for the **display** property is not supported.

IE7 Mode, IE8 Mode, and IE9 Mode (All Versions)

List markers are not displayed for **display:list-item** elements when **overflow** is not set to `visible`.

All Document Modes (All Versions)

The `list-item` value of the **display** property has no effect on generated content.

V0054:

The specification states:

```
inline-block

This value causes an element to generate a block box, which itself is flowed as a
single inline box, similar to a replaced element. The inside of an inline-block is
formatted as a block box, and the element itself is formatted as an inline replaced
element.
```

Quirks Mode and IE7 Mode (All Versions)

The generated block box does not flow as an inline box.

V0055:

The specification states:

```
list-item

This value causes an element (e.g., LI in HTML) to generate a principal block box
and a list-item inline box. For information about lists and examples of list
formatting, please consult the section on lists.
```

All Document Modes (All Versions)

The `list-item` marker is not rendered for the **col**, **colgroup**, **frame**, **frameset**, **hr**, **html**, **iframe**, **input**, **br**, **button**, and **caption** elements.

V0056:

The specification states:

```
run-in

This value creates either block or inline boxes, depending on context. Properties
apply to run-in boxes based on their final status (inline-level or block-level).
```

Quirks Mode and IE7 Mode (All Versions)

The `run-in` value of the **display** property is not supported.

V0057:

The specification states:

```
table, inline-table, table-row-group, table-column, table-column-group, table-
header-group, table-footer-group, table-row, table-cell, and table-caption

These values cause an element to behave like a table element (subject to
restrictions described in the chapter on tables).
```

Quirks Mode and IE7 Mode (All Versions)

The following variations apply:

- The `table-header-group` value for the **display** property applies only to **THEAD** elements.
- The `table-footer-group` value for the **display** property applies only to **TFOOT** elements.
- The following values of the **display** property are not supported:
- `table`
- `inline-table`
- `table-row-group`
- `table-column`
- `table-column-group`
- `table-row`
- `table-cell`
- `table-caption`

2.1.37 [CSS-Level2-2009] Section 9.3.1, Choosing a positioning scheme: 'position' property

V0058:

The specification states:

```
'position'

Value:                static | relative | absolute | fixed | inherit
Initial:              static
Applies to:           all elements
Inherited:            no
Percentages:          N/A
Media:                visual
Computed value:       as specified
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **position** property is not supported.

C0030:

The specification states:

```
relative
The box's position is calculated according to the normal flow (this is called the position in
normal flow). Then the box is offset relative to its normal position. When a box B is
relatively positioned, the position of the following box is calculated as though B were not
offset. The effect of 'position:relative' on table-row-group, table-header-group, table-
footer-group, table-row, table-column-group, table-column, table-cell, and table-caption
elements is undefined.
```

Quirks Mode, IE8 Mode, and IE9 Mode (All Versions)

When an inline element breaks across lines, the **top**, **right**, **bottom** and **left** properties are relative to those of the first linebox.

V0059:

The specification states:

```
Fixed

The box's position is calculated according to the 'absolute' model, but in
addition, the box is fixed with respect to some reference. As with the 'absolute'
model, the box's margins do not collapse with any other margins… UAs must not paginate the
content of fixed boxes. Note that UAs may print invisible
content in other ways.
```

Quirks Mode (All Versions)

Fixed positioning is not supported.

2.1.38 [CSS-Level2-2009] Section 9.3.2, Box offsets: 'top', 'right', 'bottom', 'left'

V0061:

The specification defines **top**, **right**, **bottom**, and **left**.

Quirks Mode (All Versions)

The **top**, **right**, **bottom**, and **left** attributes are not supported when used with fixed positioning.

2.1.39 [CSS-Level2-2009] Section 9.4.1, Block formatting contexts

V0062:

The specification states:

```
Floats, absolutely positioned elements, inline-blocks, table-cells, table-captions,
and elements with 'overflow' other than 'visible' (except when that value has been
propagated to the viewport) establish new block formatting contexts.
```

Quirks Mode and IE7 Mode (All Versions)

The following variations apply:

- When **overflow** is set to something other than `visible`, table-cell elements do not establish new block formatting contexts.
- When **overflow** is set to `visible`, table-cell elements establish a new block formatting context.

2.1.40 [CSS-Level2-2009] Section 9.4.2, Inline formatting context

V0063:

The specification states:

```
Horizontal margins, borders, and padding are respected between these boxes.
```

Quirks Mode and IE7 Mode (All Versions)

Right padding is ignored between inline formatted boxes.

IE8 Mode (All Versions)

Padding is lost after line breaks on inline level elements that contain block-level elements.

V0064:

The specification states:

```
When an inline box exceeds the width of a line box, it is split into several boxes
and these boxes are distributed across several line boxes. If an inline box cannot
be split (e.g., if the inline box contains a single character, or language specific
word breaking rules disallow a break within the inline box, or if the inline box is
affected by a white-space value of nowrap or pre), then the inline box overflows
the line box.
```

Quirks Mode (All Versions)

If an inline box cannot be split, then both the inline box and the line box overflow.

2.1.41 [CSS-Level2-2009] Section 9.4.3, Relative positioning

V0065:

The specification states:

```
Once a box has been laid out according to the normal flow or floated, it may be
shifted relative to this position. This is called relative positioning. Offsetting
a box (B1) in this way has no effect on the box (B2) that follows: B2 is given a
position as if B1 were not offset and B2 is not re-positioned after B1's offset is
applied. This implies that relative positioning may cause boxes to overlap.
However, if relative positioning causes an 'overflow:auto' or 'overflow:scroll' box
to have overflow, the UA must allow the user to access this content (at its offset
position), which, through the creation of scrollbars, may affect layout.
```

Quirks Mode (All Versions)

The following variations apply:

- A container with **overflow** set to `auto` does not provide a scroll bar for relatively positioned content, nor does it allow the user to access this content.
- A container with **overflow** set to `scroll` provides a scroll bar but does not contain the overflowed content. The user cannot access the overflowed content.

IE7 Mode (All Versions)

The following variations apply:

- A container with **overflow** set to `auto` does not provide a scroll bar; instead, the content bleeds outside the container.
- A container with **overflow** set to `scroll` provides a scroll bar but does not contain the overflowed content. The overflowed content bleeds outside the container (outside the scrollable section).

IE8 Mode (All Versions)

A container with **overflow** set to `scroll` causes the height of that container to become the value of the **max-height** property even when it is not necessary.

2.1.42 [CSS-Level2-2009] Section 9.5, Floats

V0066:

The specification states:

```
A float is a box that is shifted to the left or right on the current line. The most
interesting characteristic of a float (or "floated" or "floating" box) is that
content may flow along its side (or be prohibited from doing so by the 'clear'
property). Content flows down the right side of a left-floated box and down the
left side of a right-floated box.
```

Quirks Mode and IE7 Mode (All Versions)

Content before the float in tree order does not flow to the left side of a right-floated element. In addition, the content does not flow to the right side of a left-floated element. As a result, the float is moved to the next line.

All Document Modes (All Versions)

An absolutely positioned element generates an in-flow anonymous inline element if it is the last child of an inline element.

V0067:

The specification states:

```
If there's a line box, the top of the floated box is aligned with the top of the
current line box.
```

Quirks Mode and IE7 Mode (All Versions)

Floats do not align with the current line box. Instead, they create a new line box on the next line.

V0068:

The specification states:

```
Since a float is not in the flow, non-positioned block boxes created before and
after the float box flow vertically as if the float did not exist. However, line
boxes created next to the float are shortened to make room for the margin box of
the float.
```

Quirks Mode and IE7 Mode (All Versions)

The following variations apply:

- Block boxes are flowed around floats.
- Floats are not placed on the same line box as previous inline content. Instead, they are placed on a new line.

V0069:

The specification states:

```
If a shortened line box is too small to contain any further content, then it is
shifted downward until either it fits or there are no more floats present.
```

Quirks Mode and IE7 Mode (All Versions)

Floats are moved to a new line instead of interacting with the text of a previous line.

V0070:

The specification states:

```
Any content in the current line before a floated box is reflowed in the first
available line on the other side of the float. In other words, if inline boxes are
placed on the line before a left float is encountered that fits in the remaining
line box space, the left float is placed on that line, aligned with the top of the
line box, and then the inline boxes already on the line are moved accordingly to
the right of the float (the right being the other side of the left float) and vice
versa for rtl and right floats.
```

Quirks Mode and IE7 Mode (All Versions)

Floats are moved to a new line instead of interacting with previous line content.

V0071:

The specification states:

```
The contents of floats are stacked as if floats generated new stacking contexts,
except that any positioned elements and elements that actually create new stacking
contexts take part in the float's parent stacking context.
```

Quirks Mode and IE7 Mode (All Versions)

A positioned element that is the child of a floated element does not take part in the stacking context of the parent.

V0072:

The specification states:

```
A float can overlap other boxes in the normal flow (e.g., when a normal flow box
next to a float has negative margins). When this happens, floats are rendered in
front of non-positioned in-flow blocks, but behind in-flow inlines.
```

Quirks Mode and IE7 Mode (All Versions)

Inline content paints below float content.

2.1.43 [CSS-Level2-2009] Section 9.5.1, Positioning the float: the 'float' property

V0073:

The specification states:

```
None

The box is not floated.
```

Quirks Mode and IE7 Mode (All Versions)

A line break is added after elements that are positioned by setting **float** to `none`.

V0074:

The specification states:

```
3. The right outer edge of a left-floating box may not be to the right of the left
outer edge of any right-floating box that is to the right of it. Analogous rules
hold for right-floating elements.
```

Quirks Mode (All Versions)

The following variations apply:

- Preventing the right outer edge of the left box from passing the left outer edge of the right box is not supported.
- Preventing the left outer edge of the right box from passing the right outer edge of the left box is not supported.

2.1.44 [CSS-Level2-2009] Section 9.5.2, Controlling flow next to floats: the 'clear' property

V0075:

The specification states:

```
'clear'

Value:                none | left | right | both | inherit
Initial:              none
Applies to:           block-level elements
Inherited:            no
Percentages:          N/A
Media:                visual
Computed value:       as specified
This property indicates which sides of an element's box(es) may not be adjacent to an earlier
floating box. The 'clear'property does not consider floats inside the element itself or in
other block formatting contexts.

For run-in boxes,this property applies to the final block box to which the run-in box belongs
```

Quirks Mode and IE7 Mode (All Versions)

The following variations apply:

- The **clear** property also applies to inline elements such as and <a>.
- The `inherit` value of the **clear** property is not supported.

Note The [CSS-Level1-2008] specification, section 5.5.26 'clear,' states that clear may apply to all elements.

All Document Modes (All Versions)

Dynamic setting of the **clear** property on a run-in element is ignored.

V0076:

The specification states:

```
Left

The clearance of the generated box is set to the amount necessary to place the top
border edge below the bottom outer edge of any left-floating boxes that resulted
from elements earlier in the source document.
```

Quirks Mode and IE7 Mode (All Versions)

When the width of an element is set to `auto` and has the **clear** property applied, a blank line box is displayed after the floated element.

V0077:

The specification states:

```
Both

The clearance of the generated box is set to the amount necessary to place the top
border edge below the bottom outer edge of any right-floating and left-floating
boxes that resulted from elements earlier in the source document.
```

Quirks Mode and IE7 Mode (All Versions)

When the width of an element is set to `auto` and has the **clear** property applied, a blank line box is displayed after the floated element.

V0078:

The specification states:

```
If this hypothetical position of the element's top border edge is not past the
relevant floats, then its clearance must be set to the greater of:
1. The amount necessary to place the border edge of the block even with the bottom
outer edge of the lowest float that is to be cleared.
2. The amount necessary to make the sum of the following equal to the distance to
which these margins collapsed when the hypothetical position was calculated:
a. the margins collapsing above the clearance -the clearance itself
b. if the block's own margins collapse together: the block's top margin
c. if the block's own margins do not collapse together: the margins
collapsing below the clearance
Note: The clearance can be negative
```

Quirks Mode and IE7 Mode (All Versions)

Regardless of the clearance, the top margin of the cleared element pushes the cleared element down.

2.1.45 [CSS-Level2-2009] Section 9.6.1, Fixed positioning

V0079:

The specification states:

```
Fixed positioning is a subcategory of absolute positioning. The only difference is
that for a fixed positioned box, the containing block is established by the
viewport. For continuous media, fixed boxes do not move when the document is
scrolled. In this respect, they are similar to fixed background images. For paged
media, boxes with fixed positions are repeated on every page. This is useful for
placing, for instance, a signature at the bottom of each page. Boxes with fixed
position that are larger than the page area are clipped. Parts of the fixed
position box that are not visible in the initial containing block will not print.
```

Quirks Mode (All Versions)

The `fixed` value of the **position** property is not supported.

2.1.46 [CSS-Level2-2009] Section 9.9.1, Specifying the stack level: the 'z-index' property

V0080:

The specification states:

```
z-index

Value:                 auto | <integer> | inherit
Initial:               auto
Applies to:            positioned elements
Inherited:             no
Percentages:           N/A
Media:                 visual
Computed value:        as specified

For a positioned box, the 'z-index' property specifies:

The stack level of the box in the current stacking context.
Whether the box establishes a local stacking context.
```

Quirks Mode and IE7 Mode (All Versions)

The initial value of the **z-index** property is 0.

V0081:

The specification states:

```
Auto

The stack level of the generated box in the current stacking context is the same as
its parent's box. The box does not establish a new local stacking context.
```

Quirks Mode and IE7 Mode (All Versions)

The `auto` value is mapped to '0' so that the initial value of the **z-index** property is '0'.

V0082:

The specification states:

```
The root element forms the root stacking context. Other stacking contexts are
generated by any positioned element (including relatively positioned elements)
having a computed value of 'z-index' other than 'auto'. Stacking contexts are not
necessarily related to containing blocks.
```

Quirks Mode (All Versions)

Assigning an element a relative, absolute, or fixed position generates a stacking context.

IE7 Mode (All Versions)

Assigning an element a relative or absolute position generates a stacking context.

2.1.47 [CSS-Level2-2009] Section 10.2, Content width: the 'width' property

V0083:

The specification states:

```
<percentage>

Specifies a percentage width. The percentage is calculated with respect to the
width of the generated box's containing block. If the containing block's width
depends on this element's width, then the resulting layout is undefined in CSS 2.1.
Note: For absolutely positioned elements whose containing block is based on a
block-level element, the percentage is calculated with respect to the width of the
padding box of that element. This is a change from CSS1, where the percentage width
was always calculated with respect to the content box of the parent element.
```

Quirks Mode (All Versions)

The percentage is calculated with respect to the content box of the parent element. In addition, the box model includes borders, padding, and content widths.

2.1.48 [CSS-Level2-2009] Section 10.3.3, Block-level, non-replaced elements in normal flow

V0084:

The specification states:

```
If all of the above have a computed value other than 'auto', the values are said to
be "over-constrained" and one of the used values will have to be different from its
computed value. If the 'direction' property of the containing block has the value
'ltr', the specified value of 'margin-right' is ignored and the value is calculated
so as to make the equality true. If the value of 'direction' is 'rtl', this happens
to 'margin-left' instead.
```

Quirks Mode (All Versions)

When one or more of the listed properties are "over-constrained" and the value of the **direction** property is `ltr`, the **margin-right** property is not adjusted. Instead, both margins and paddings are applied and the content box is reduced.

2.1.49 [CSS-Level2-2009] Section 10.3.7, Absolutely positioned, non-replaced elements

V0085:

The specification states:

```
5. 'width' is 'auto', 'left' and 'right' are not 'auto', then solve for 'width'
```

Quirks Mode (All Versions)

Absolutely positioned elements cannot be sized by their `right` and `left` values. They must have either an intrinsic or specified `width`.

2.1.50 [CSS-Level2-2009] Section 10.6.4, Absolutely positioned, non-replaced elements

V0086:

The specification states:

```
If all three of 'top', 'height', and 'bottom' are auto, set 'top' to the static
position and apply rule number three below.
If none of the three are 'auto': If both 'margin-top' and 'margin-bottom' are
'auto', solve the equation under the extra constraint that the two margins get
equal values. If one of 'margin-top' or 'margin-bottom' is 'auto', solve the
equation for that value. If the values are over-constrained, ignore the value for
'bottom' and solve for that value.
Otherwise, pick the one of the following six rules that applies.

1.'top' and 'height' are 'auto' and 'bottom' is not 'auto', then the height is
based on the content, set 'auto' values for 'margin-top' and 'margin-bottom' to 0,
and solve for 'top'
2. 'top' and 'bottom' are 'auto' and 'height' is not 'auto', then set 'top' to the
static position, set 'auto' values for 'margin-top' and 'margin-bottom' to 0, and
solve for 'bottom'
3. 'height' and 'bottom' are 'auto' and 'top' is not 'auto', then the height is
based on the content, set 'auto' values for 'margin-top' and 'margin-bottom' to 0,
and solve for 'bottom'
4. 'top' is 'auto', 'height' and 'bottom' are not 'auto', then set 'auto' values
for 'margin-top' and 'margin-bottom' to 0, and solve for 'top'
5. 'height' is 'auto', 'top' and 'bottom' are not 'auto', then 'auto' values for
'margin-top' and 'margin-bottom' are set to 0 and solve for 'height'
6. 'bottom' is 'auto', 'top' and 'height' are not 'auto', then set 'auto' values
for 'margin-top' and 'margin-bottom' to 0 and solve for 'bottom'.
```

Quirks Mode and IE7 Mode (All Versions)

If none of the three properties (**top, height, and bottom**) are set to `auto` and if both **margin-top** and **margin-bottom** are `auto`, then **margin-top** is set to `0` and the equation is solved for **margin-bottom**.

Quirks Mode (All Versions)

The following variations occur in this mode:

- If none of the three properties (**top, height, and bottom**) are set to `auto` and when **margin-top** is `auto` and **margin-bottom** is not, **margin-top** is set to `0` and the equation is solved for **margin-bottom**.
- Rule 5: When **Height** is auto and **top** and **bottom** are not `auto`, then the `auto` values for **margin-top** and **margin-bottom** are set to `0`, **height** is set to minimum height (the current line height) and the equation is solved for **bottom**.

2.1.51 [CSS-Level2-2009] Section 10.6.7, 'Auto' heights for block formatting context roots

V0087:

The specification states:

```
In addition, if the element has any floating descendants whose bottom margin edge
is below the bottom, then the height is increased to include those edges. Only
floats that are children of the element itself or of descendants in the normal flow
are taken into account, e.g., floats inside absolutely positioned descendants or
other floats are not.
```

IE7 Mode (All Versions)

The block formatting context container does not expand its height to accommodate the bottom margin of its floating content.

2.1.52 [CSS-Level2-2009] Section 10.7, Minimum and maximum heights: 'min-height' and 'max-height'

V0088:

The specification states:

```
<percentage>

Specifies a percentage for determining the used value. The percentage is calculated
with respect to the height of the generated box's containing block. If the height
of the containing block is not specified explicitly (i.e., it depends on content
height), and this element is not absolutely positioned, the percentage value is
treated as '0' (for 'min-height') or 'none' (for 'max-height').
```

Quirks Mode (All Versions)

The **min-height** property is not supported.

V0089:

The specification states:

```
It is sometimes useful to constrain the height of elements to a certain range. Two
properties offer this functionality:

'min-height'
Value:                  <length> | <percentage> | inherit
Initial:                0
Applies to:             all elements but non-replaced inline elements, table columns, and
column groups
Inherited:              no
Percentages:            see prose
Media:                  visual
Computed value:         the percentage as specified or the absolute length

'max-height'
Value:                  <length> | <percentage> | none | inherit
```

```
Initial:               0
Applies to:            all elements but non-replaced inline elements, table columns, and
column groups
Inherited:             no
Percentages:           see prose
Media:                 visual
Computed value:        the percentage as specified or the absolute length
```

Quirks Mode (All Versions)

The **min-height** and **max-height** properties are not supported.

IE7 Mode (All Versions)

The `inherit` value of the **max-height** and **min-height** properties is not supported.

2.1.53 [CSS-Level2-2009] Section 10.8, Line height calculations: the 'line-height' and 'vertical-align' properties

V0090:

The specification states:

```
As described in the section on inline formatting contexts, user agents flow inline
boxes into a vertical stack of line boxes. The height of a line box is determined
as follows:

1. The height of each inline box in the line box is calculated (see "Calculating
heights and margins" and the 'line-height' property).
2. The inline boxes are aligned vertically according to their 'vertical-align'
property.
3. The line box height is the distance between the uppermost box top and the
lowermost box bottom.
4. If the resulting height is smaller than the minimal height of line boxes for
this block, as specified by the 'line-height' property, the height is increased to
be that minimal height.
```

IE8 Mode and IE9 Mode (All Versions)

In almost standards mode, step 4 is not followed. The line box height remains the distance between the uppermost box top and the lowermost box bottom.

All Document Modes (All Versions)

The É `(É)` character does not align properly when **vertical-align** is set to anything other than `baseline`.

V0091:

The specification states:

```
Empty inline elements generate empty inline boxes, but these boxes still have
margins, padding, borders and a line height, and thus influence these calculations
just like elements with content.
```

Quirks Mode and IE7 Mode (All Versions)

Empty inline elements have no effect on the page layout regardless of their computed margins, paddings, borders, and line heights.

IE8 Mode and IE9 Mode (All Versions)

In almost standards mode, empty elements do not influence line height calculations.

2.1.54 [CSS-Level2-2009] Section 10.8.1, Leading and half-leading

V0092:

The specification states:

```
When the 'line-height' value is less than the content height, the final inline box
height will be less than the font size and the rendered glyphs will "bleed" outside
the box. If such a box touches the edge of a line box, the rendered glyphs will
also "bleed" into the adjoining line box.
```

Quirks Mode and IE7 Mode (All Versions)

When the value of **line-height** is less than the content height, the portion of the font that would pass below the bottom edge of the content box is clipped and does not bleed outside of the box.

IE7 Mode (All Versions)

If a **width**, **max-width**, or **min-width** property is assigned to the inline box, the portion of the font that would pass above the top edge of the content box is clipped and does not bleed outside the box.

V0093:

The specification states:

```
'line-height'

Value:                  normal | <number> | <length> | <percentage> | inherit
Initial:                normal
Applies to:             all elements
Inherited:              yes
Percentages:            refer to the font size of the element itself
Media:                  visual
Computed value:         for <length> and <percentage> the absolute value; otherwise as
specified
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **line-height** property is not supported.

V0094:

The specification states:

```
On a block-level, table-cell, table-caption or inline-block element whose content
is composed of inline-level elements, 'line-height' specifies the minimal height of
```

```
line boxes within the element. The minimum height consists of a minimum height
above the block's baseline and a minimum depth below it, exactly as if each line
box starts with a zero-width inline box with the block's font and line height
properties (what TEX calls a "strut").
```

IE8 Mode and IE9 Mode (All Versions)

In almost standards mode, **line-height** does not define a minimal line height for inline content in block-level, table-cell, table-caption, or inline-block elements.

V0095:

The specification states:

```
On an inline-level element, 'line-height' specifies the height that is used in the
calculation of the line box height (except for inline replaced elements, where the
height of the box is given by the 'height' property).
```

IE8 Mode and IE9 Mode (All Versions)

In almost standards mode, the specified line-height has no effect on line box height calculation.

V0096:

The specification states:

```
The following values only have meaning with respect to a parent inline-level
element, or to the strut of a parent block-level, table-cell, table-caption or
inline-block elementbaselineAlign the baseline of the box with the baseline of the
parent box. If the box does not have a baseline, align the bottom margin edge with
the parent's baseline.
```

Quirks Mode and IE7 Mode (All Versions)

If a box (e.g. empty inline-block or **<img/>** element) does not have a baseline, the element's bottom margin edge is aligned with the parent's bottom edge instead of with the parent's baseline.

V0097:

The specification states:

```
Middle

Align the vertical midpoint of the box with the baseline of the parent box plus
half the x-height of the parent.
```

Quirks Mode and IE7 Mode (All Versions)

The font ex height is not correctly calculated. It is assigned a value of 0.5em.

2.1.55 [CSS-Level2-2009] Section 11.1.1, Overflow: the 'overflow' property

V0098:

The specification states:

```
Overflow

Value:                  visible | hidden | scroll | auto | inherit
Initial:                visible
Applies to:             non-replaced block-level elements, table cells, and inline-block
elements
Inherited:              no
Percentages:            N/A
Media:                  visual
Computed value:         as specified
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **overflow** property is not supported.

All Document Modes (All Versions)

The `scroll` value of the **overflow** property is not supported on **tbody** elements.

V0099:

The specification states:

```
When the root element is an HTML "HTML" element or an XHTML "html" element, and
that element has an HTML "BODY" element or an XHTML "body" element as a child, user
agents must instead apply the 'overflow' property from the first such child element
to the viewport, if the value on the root element is 'visible'. The 'visible' value
when used for the viewport must be interpreted as 'auto'. The element from which
the value is propagated must have a used value for 'overflow' of 'visible'.
```

Quirks Mode and IE7 Mode (All Versions)

The **overflow** property is not propagated from the first child element to the viewport.

2.1.56 [CSS-Level2-2009] Section 11.1.2, Clipping: the 'clip' property

V0100:

The specification states:

```
'clip'

Value:                  <shape> | auto | inherit
Initial:                auto
Applies to:             absolutely positioned elements
Inherited:              no
Percentages:            N/A
Media:                  visual
Computed value:         For rectangle values, a rectangle consisting of four
computed lengths; otherwise, as specified

The 'clip' property applies only to absolutely positioned elements.
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **clip** property is not supported.

C0031:

The specification states:

```
auto
The element does not clip.
```

Quirks Mode and IE7 Mode (All Versions)

For positioned elements, **clip:auto** is treated as **clip:rect**(`auto,auto,auto,auto`).

V0101:

The specification states:

```
<shape>

In CSS 2.1, the only valid <shape> value is: rect(<top>, <right>, <bottom>, <left>)
where <top> and <bottom> specify offsets from the top border edge of the box, and
<right>, and <left> specify offsets from the left border edge of the box in left-
to-right text and from the right border edge of the box in right-to-left text.
Authors should separate offset values with commas. User agents must support
separation with commas, but may also support separation without commas (but not a
combination), because a previous revision of this specification was ambiguous in
this respect.
```

Quirks Mode (All Versions)

Offset separation with a combination of commas and white spaces is supported.

IE7 Mode (All Versions)

Separation with commas is not supported.

V0102:

The specification states:

```
An element's clipping region clips out any aspect of the element (e.g., content,
children, background, borders, text decoration, outline and visible scrolling
mechanism — if any) that is outside the clipping region. Content that has been
clipped does not cause overflow.
```

Quirks Mode and IE7 Mode (All Versions)

Clipped content causes overflow.

All Document Modes (All Versions)

Content that has been clipped causes overflow; while the scrollbar is drawn, it will not be active.

2.1.57 [CSS-Level2-2009] Section 11.2, Visibility: the 'visibility' property

V0103:

The specification states:

```
'visibility'

Value:                visible | hidden | collapse | inherit
Initial:              visible
Applies to:           all elements
Inherited:            yes
Percentages:          N/A
Media:                visual
Computed value:       as specified
```

Quirks Mode and IE7 Mode (All Versions)

The **visibility** property does not apply to elements with **display** values of `table-column-group` and `table-column`.

V0104:

The specification states:

```
Collapse

Please consult the section on dynamic row and column effects in tables. If used on
elements other than rows, row groups, columns, or column groups, 'collapse' has the
same meaning as 'hidden'.
```

Quirks Mode and IE7 Mode (All Versions)

An element is still visible when the value of **visibility** is `collapse`.

2.1.58 [CSS-Level2-2009] Section 12.1, The :before and :after pseudo-elements

V0105:

The specification states:

```
The :before and :after pseudo-elements specify the location of content before and
after an element's document tree content.
```

Quirks Mode and IE7 Mode (All Versions)

The **:before** and **:after** pseudo-elements are not supported.

2.1.59 [CSS-Level2-2009] Section 12.2, The 'content' property

V0106:

The specification states:

```
'content'

Value:                  normal | none | [ <string> | <uri> | <counter> |
attr(<identifier>) | open-quote | close-quote | no-open-quote | no-close-quote ]+ |
inherit
Initial:                normal
Applies to:             :before and :after pseudo-elements
Inherited:              no
Percentages:            N/A
Media:                  all
Computed value:         On elements, always computes to 'normal'. On :before and
:after, if 'normal' is specified, computes to 'none'. Otherwise, for URI values,
the absolute URI; for attr() values, the resulting string; for other keywords, as
specified.
```

Quirks Mode and IE7 Mode (All Versions)

The **:before** and **:after** pseudo-elements are not supported.

2.1.60 [CSS-Level2-2009] Section 12.3.2, Inserting quotes with the 'content' property

V0107:

The specification states:

```
Quotation marks are inserted in appropriate places in a document with the 'open-
quote' and 'close-quote' values of the 'content' property. Each occurrence of
'open-quote' or 'close-quote' is replaced by one of the strings from the value of
'quotes', based on the depth of nesting.
```

Quirks Mode and IE7 Mode (All Versions)

The **quotes** property, and the `open-quote` and the `close-quote` values of the **content** property are not supported.

All Document Modes (All Versions)

The `no-open-quote` and `no-close-quote` values for the **content** property incorrectly change the nesting levels of counters.

2.1.61 [CSS-Level2-2009] Section 12.4, Automatic counters and numbering

V0108:

The specification states:

```
The 'counter-reset' property also contains a list of one or more names of counters,
each one optionally followed by an integer. The integer gives the value that the
counter is set to on each occurrence of the element. The default is 0.
```

Quirks Mode and IE7 Mode (All Versions)

The **counter-reset** property is not supported.

2.1.62 [CSS-Level2-2009] Section 12.4.1, Nested counters and scope

V0109:

The specification states:

```
Counters are "self-nesting", in the sense that resetting a counter in a descendant
element or pseudo-element automatically creates a new instance of the counter.
```

Quirks Mode and IE7 Mode (All Versions)

Counters are not supported.

All Document Modes (All Versions)

Counters reset by a parent element are not used by the child elements when counting. The **counter-increment** property can only be used outside of pseudo-elements.

V0110:

The specification states:

```
The 'counters()' function generates a string composed of all of the counters with
the same name that are in scope, separated by a given string.
```

Quirks Mode and IE7 Mode (All Versions)

The **counters()** function is not supported.

2.1.63 [CSS-Level2-2009] Section 12.4.2, Counter styles

V0111:

The specification states:

```
By default, counters are formatted with decimal numbers, but all the styles
available for the 'list-style-type' property are also available for counters.
```

Quirks Mode and IE7 Mode (All Versions)

Counter styles are not supported.

2.1.64 [CSS-Level2-2009] Section 12.4.3, Counters in elements with 'display: none'

V0112:

The specification states:

```
An element that is not displayed ('display' set to 'none') cannot increment or
reset a counter.
```

Quirks Mode and IE7 Mode (All Versions)

Counters are not supported.

2.1.65 [CSS-Level2-2009] Section 12.5.1, Lists: the 'list-style-type', 'list-style-image', 'list-style-position', and 'list-style' properties

V0113:

The specification states:

```
'List-style-type'

Value                  disc | circle | square | decimal | decimal-leading-zero |
lower-roman | upper-roman | lower-greek | lower-latin | upper-latin | armenian |
georgian | lower-alpha | upper-alpha | none | inherit
Initial:               disc
Applies to:            elements with 'display:list-item'
Inherited:             yes
Percentages:           N/A
Media:                 Visual
Comuted value:         as specified

This property specifies appearance of the list item marker if 'list-style-image'
has the value 'none' or if the image pointed to by the URI cannot be displayed. The
value 'none' specifies no marker, otherwise there are three types of marker:
glyphs, numbering systems, and alphabetic systems.
```

All Document Modes (All Versions)

Roman numerals above 4000 are not supported. These numbers are switched to decimals.

Quirks Mode and IE7 Mode (All Versions)

The `decimal-leading-zero`, `lower-greek`, `armenian`, `georgian`, `lower-latin`, `upper-latin`, and `inherit` values are not supported.

IE7 Mode (All Versions)

The `list-item` value for the **display** property is supported only if it appears within an unordered list (**UL**) element or an ordered list (**OL**) element.

IE7 Mode, IE8 Mode, and IE9 Mode (All Versions)

List markers are not displayed for **display:list-item** elements when **overflow** is not set to `visible`.

All Document Modes (All Versions)

The `list-item` value of the **display** property has no effect on generated content.

V0114:

The specification states:

```
decimal-leading-zero

Decimal numbers numbers padded by initial zeros (e.g., 01, 02, 03, ..., 98, 99).
```

Quirks Mode and IE7 Mode (All Versions)

The `decimal-leading-zero` value for the **list-style-type** property is not supported.

V0115:

The specification states:

```
Georgian

Traditional Georgian numbering (an, ban, gan, ..., he, tan, in, in-an, ...).
```

Quirks Mode and IE7 Mode (All Versions)

The `georgian` value for the **list-style-type** property is not supported.

V0116:

The specification states:

```
Armenian

Traditional Armenian numbering.
```

Quirks Mode and IE7 Mode (All Versions)

The `armenian` value for the **list-style-type** property is not supported.

V0117:

The specification states:

```
lower-latin or lower-alpha

Lowercase ascii letters (a,b,c, …z).
```

Quirks Mode and IE7 Mode (All Versions)

The `lower-latin` values for the **list-style-type** property are not supported.

V0118:

The specification states:

```
upper-latin or upper-alpha

Uppercase ascii letters (A,B,C, …Z).
```

Quirks Mode and IE7 Mode (All Versions)

The `upper-latin` values for the **list-style-type** property are not supported.

V0119:

The specification states:

```
lower-greek

Lowercase classical Greek alpha, beta, gamma, ... (α, β, γ, ...).
```

Quirks Mode and IE7 Mode (All Versions)

The `lower-greek` value for the **list-style-type** property is not supported.

V0120:

The specification states:

```
'list-style-image'

Value:                  <uri> | none | inherit
Initial:                none
Applies to:             elements with 'display: list-item'
Inherited:              yes
Percentages:            N/A
Media:                  visual
Computed value:         absolute URI or 'none'
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **list-style-image** property is not supported.

V0121:

The specification states:

```
list-style-position

Value:                  inside | outside | inherit
Initial:                outside
Applies to:             elements with 'display: list-item'
Inherited:              yes
Percentages:            N/A
Media:                  visual
Computed value:         as specified
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **list-style-position** property is not supported.

IE7 Mode, IE8 Mode, and IE9 Mode (All Versions)

The `outside` value of the **list-style-position** property is not supported when used in combination with any value of the **overflow** property other than `visible`.

V0122:

The specification states:

```
Outside
The marker box is outside the principal block box. CSS 2.1 does not specify the
precise location of the marker box, but does require that for list items whose
'direction' property is 'ltr' the marker box be on the left side of the content and
for elements whose 'direction' property is 'rtl' the marker box be on the right
side of the content. 'overflow' on the element does not clip the marker box. The
marker box is fixed with respect to the principal block box's border and does not
scroll with the principal block box's content. The size or contents of the marker
box may affect the height of the principal block box and/or the height of its first
line box, and in some cases may cause the creation of a new line box.
```

IE8 Mode (Internet Explorer 8)

The marker box is not rendered when the **overflow** property is set to `scroll`.

V0123:

The specification states:

```
list-style

Value:                 [ <'list-style-type'> || <'list-style-position'> || <'list-style-
image'> ] | inherit
Initial:               see individual properties
Applies to:            elements with 'display: list-item'
Inherited:             yes
Percentages:           N/A
Media:                 visual
Computed value:        see individual properties
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **list-style** property is not supported

IE7 Mode (All Versions)

The **list-style-type** property is not supported.

2.1.66 [CSS-Level2-2009] Section 13.2.1, Page margins

V0124:

The specification states:

```
The page context has no notion of fonts, so 'em' and 'ex' units are not allowed.
Percentage values on the margin properties are relative to the dimensions of the
page box; for left and right margins, they refer to the width of the page box while
for top and bottom margins, they refer to the height of the page box. All other
units associated with the respective CSS 2.1 properties are allowed.
```

Quirks Mode and IE7 Mode (All Versions)

The following variations apply:

- Margin properties that have values in inches, centimeters, or pixels are not supported.

- Percentage values on margin properties are not supported.

2.1.67 [CSS-Level2-2009] Section 13.2.2, Page selectors: selecting left, right, and first pages

V0125:

The specification states:

```
All pages are automatically classified by user agents into either the :left or
:right pseudo-class.

@page :left {
  margin-left: 4cm;
  margin-right: 3cm;
}

@page :right {
  margin-left: 3cm;
  margin-right: 4cm;
}
```

Quirks Mode and IE7 Mode (All Versions)

The **@page :right** and **@page :left** rules are not supported.

V0126:

The specification states:

```
Properties specified in a :left or :right @page rule override those specified in an
@page rule that has no pseudo-class specified. Properties specified in a :first
@page rule override those specified in :left or :right @page rules.
```

Quirks Mode and IE7 Mode (All Versions)

The **@page :first** rule is not supported.

V0127:

The specification states:

```
Margin declarations on left, right, and first pages may result in different page
area widths. To simplify implementations, user agents may use a single page area
width on left, right, and first pages. In this case, the page area width of the
first page should be used.
```

Quirks Mode and IE7 Mode (All Versions)

The **:left**, **:right**, and **:first** pseudo classes are not supported.

IE8 Mode (All Versions)

The page area width of the first page is used.

2.1.68 [CSS-Level2-2009] Section 13.2.3, Content outside the page box

V0128:

The specification states:

```
The exact formatting of such elements lies outside the scope of this specification.
However, we recommend that user agents observe the following general principles
concerning content outside the page box:

* Content should be allowed slightly beyond the page box to allow pages to "bleed".
* User agents should avoid generating a large number of empty page boxes to honor
the positioning of elements (e.g., you do not want to print 100 blank pages).
```

Quirks Mode and IE7 Mode (All Versions)

A large number of empty page boxes is generated to honor the positioning of elements.

IE9 Mode (All Versions)

Content that goes slightly beyond the page box does not "bleed," and is discarded.

2.1.69 [CSS-Level2-2009] Section 13.3.1, Page break properties: 'page-break-before', 'page-break-after', 'page-break-inside'

V0129:

The specification states:

```
page-break-before

Value:                auto | always | avoid | left | right | inherit
Initial:              auto
Applies to:           block-level elements (but see text)
Inherited:            no
Percentages:          N/A
Media:                visual, paged
Computed value:       as specified
```

Quirks Mode and IE7 Mode (All Versions)

The `avoid` value and the `inherit` value of the **page-break-before** property are not supported.

IE8 Mode and IE9 Mode (All Versions)

The **page-break-before** property is not supported for the following:

- **run-in** elements
- **inline-table** elements
- block-level **inline-block** elements

IE9 Mode (All Versions)

When two elements have a page break in between their collapsing margins, the top margin of the second element is not properly collapsed.

An extra page is generated when the **page-break-before** property is applied to a table row.

V0130:

The specification states:

```
'page-break-after'

Value:                auto | always | avoid | left | right | inherit
Initial:              auto
 Applies to:          block-level elements (but see text)
Inherited:            no
Percentages:          N/A
Media:                visual, paged
Computed value:       as specified
```

Quirks Mode and IE7 Mode (All Versions)

The `avoid` and the `inherit` values of the **page-break-after** property are not supported.

IE8 Mode and IE9 Mode

The **page-break-after** property is not supported for the following:

- **inline-block** elements
- **inline-table** elements
- block-level **run-in** elements

IE9 Mode (All Versions)

When two elements have a page break in between their collapsing margins, the top margin of the second element is not properly collapsed.

An extra page is generated when the **page-break-before** property is applied to a table row.

V0131:

The specification states:

```
'page-break-inside'

Value:                avoid | auto | inherit
Initial:              auto
Applies to:           block-level elements (but see text)
Inherited:            no
Percentages:          N/A
Media:                visual, paged
Computed value:       as specified
```

Quirks Mode and IE7 Mode (All Versions)

The **page-break-inside** property is not supported.

IE9 Mode (All Versions)

An extra page is generated when the **page-break-before** property is applied to a table row.

V0132:

The specification states:

```
Whether the first page of a document is :left or :right depends on the major
writing direction of the document. A conforming user agent may interpret the values
'left' and 'right' as 'always'.
```

All Document Modes (All Versions)

The `left` and `right` values are interpreted as `always` for the **page-break** properties.

2.1.70 [CSS-Level2-2009] Section 13.3.2, Breaks inside elements: 'orphans', 'widows'

V0133:

The specification states:

```
'orphans'

Value:                <integer> | inherit
Initial:              2
Applies to:           block-level elements
Inherited:            yes
Percentages:          N/A
Media:                visual, paged
Computed value:       as specified
```

Quirks Mode and IE7 Mode (All Versions)

The **orphans** property is not supported.

V0134:

The specification states:

```
'widows'

Value:                <integer> | inherit
Initial:              2
Applies to:           block-level elements
Inherited:            yes
Percentages:          N/A
Media:                visual, paged
Computed value:       as specified
```

Quirks Mode and IE7 Mode (All Versions)

The **widows** property is not supported.

2.1.71 [CSS-Level2-2009] Section 13.3.3, Allowed page breaks

V0135:

The specification states:

```
These breaks are subject to the following rules:

Rule A: Breaking at (1) is allowed only if the 'page-break-after' and 'page-break-
before' properties of all the elements generating boxes that meet at this margin
allow it, which is when at least one of them has the value 'always', 'left', or
'right', or when all of them are 'auto'.

Rule B: However, if all of them are 'auto' and a common ancestor of all the
elements has a 'page-break-inside' value of 'avoid', then breaking here is not
allowed.

Rule C: Breaking at (2) is allowed only if the number of line boxes between the
break and the start of the enclosing block box is the value of 'orphans' or more,
and the number of line boxes between the break and the end of the box is the value
of 'widows' or more.

Rule D: In addition, breaking at (2) or (3) is allowed only if the 'page-break-
inside' property of the element and all its ancestors is 'auto'.
```

Quirks Mode and IE7 Mode (All Versions)

The following variations apply:

- Page breaks are allowed after elements even with **page-break-after** set to `avoid`; page breaks are allowed before elements even with **page-break-before** set to `avoid`.
- Page breaks are not made in the vertical margins if the ancestor has **page-break-inside** set to `avoid`.
- Rule C is not supported. Page-breaking occurs irrespective of the number of line boxes between the break on the condition that the start of the enclosing block box is the value of `orphans` or greater, and that the number of line boxes between the break and the end of the box is the value of `widows` or greater.
- Page breaks occur even if an element or ancestor has **page-break-inside** set to `avoid`.

IE8 Mode and IE9 Mode (All Versions)

- Page breaks are made in the vertical margins if ancestor has **page-break-inside** set to `avoid`.

V0136:

The specification states:

```
If the above does not provide enough break points to keep content from overflowing
the page boxes, then rules A, B and D are dropped in order to find additional
breakpoints. If that still does not lead to sufficient break points, rule C is
dropped as well, to find still more break points.
```

Quirks Mode and IE7 Mode (All Versions)

Rule D is dropped. Page breaks occur within blocks when there aren't enough break points to keep content from overflowing the page boxes.

2.1.72 [CSS-Level2-2009] Section 14.1, Foreground color: the 'color' property

V0137:

The specification states:

```
Color

Value:                <color> | inherit
Initial:              depends on user agent
Applies to:           all elements
Inherited:            yes
Percentages:          N/A
Media:                visual
Computed value:       as specified
```

Quirks Mode and IE7 Mode (All Versions)

The following variations apply:

- The `inherit` value of the **color** property is not supported.
- RGB values specified as positive integers (for example, (0, +129, 0)) are not parsed and the declaration is ignored.

2.1.73 [CSS-Level2-2009] Section 14.2.1, Background properties: 'background-color', 'background-image', 'background-repeat', 'background-attachment', 'background-position', and 'background'

V0138:

The specification states:

```
'background-color'

Value:                <color> | transparent | inherit
Initial:              transparent
Applies to:           all elements
Inherited:            no
Percentages:          N/A
Media:                visual
Computed value:       as specified

This property sets the background color of an element, either a <color> value or
the keyword 'transparent', to make the underlying colors shine through.
```

Quirks Mode and IE7 Mode (All Versions)

The following variations apply:

- RGB values for **background-color** given as positive integers are not supported.

- Background color is not supported when the **display** property has a value of `table-column-group` or `table-column`.

IE7 Mode (All Versions)

- The `inherit` value of the **background-color** property is not supported.

V0139:

The specification states:

```
'background-image'

Value:                  <uri> | none | inherit
Initial:                none
Applies to:             all elements
Inherited:              no
Percentages:            N/A
Media:                  visual
Computed value:         absolute URI or none
```

Quirks Mode and IE7 Mode (All Versions)

The following variations apply:

- The `inherit` value of the **background-image** property is not supported.
- The **background-image** property is not supported when the **display** property is set to `table-column-group` or `table-column`.

V0140:

The specification states:

```
'background-repeat'

Value:                  repeat | repeat-x | repeat-y | no-repeat | inherit
Initial:                repeat
Applies to:             all elements
Inherited:              no
Percentages:            N/A
Media:                  visual
Computed value:         as specified
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **background-repeat** property is not supported.

V0141:

The specification states:

```
'background-attachment'

Value:n                 scroll | fixed | inherit
Initial:                scroll
```

```
Applies to:            all elements
Inherited:             no
Percentages:           N/A
Media:                 visual
Computed value:        as specified
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **background-attachment** property is not supported.

IE7 Mode (All Versions)

A background image attached to the body scrolls with the viewport rather than the body's containing block.

V0142:

The specification states:

```
'background-position'

Value:                 [ [ <percentage> | <length> | left | center | right ] [
<percentage> | <length> | top | center | bottom ]? ] | [ [ left | center | right ]
|| [ top | center | bottom ] ] | inherit
Initial:               0% 0%
Applies to:            all elements
Inherited:             no
Percentages:           refer to the size of the box itself
Media:                 visual
Computed value:        for <length> the absolute value, otherwise a percentage
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **background-position** property is not supported.

All Document Modes (All Versions)

The background origin of an inline element is not adjusted to reflect vertical alignment.

C0032:

The specification states:

```
<percentage>
A percentage X aligns the point X% across (for horizontal) or down (for vertical) the image
with the point X% across (for horizontal) or down (for vertical) the element's padding box.
For example, with a value pair of '0% 0%',the upper left corner of the image is aligned with
the upper left corner of the padding box. A value pair of '100% 100%' places the lower right
corner of the image in the lower right corner of the padding box. With a value pair of '14%
84%', the point 14% across and 84% down the image is to be placed at the point 14% across and
84% down the padding box
```

All Document Modes (All Versions)

The **background-position** of a table-* element is incorrectly treated as being relative to the top left corner of the table box.

C0033:

The specification states:

```
<length>
A length L aligns the top left corner of the image a distance L to the right of (for
horizontal) or below (for vertical) the top left corner of the element's padding box. For
example, with a value pair of '2cm 1cm', the upper left corner of the image is placed 2cm to
the right and 1cm below the upper left corner of the padding box.
```

All Document Modes (All Versions)

The **background-position** of a table-* element is incorrectly treated as being relative to the top left corner of the table box.

V0143:

The specification states:

```
'background'

Value:                  [<'background-color'> || <'background-image'> ||
<'background-repeat'> || <'background-attachment'> || <'background-position'>] |
inherit
Initial:                see individual properties
Applies to:             all elements
Inherited:              no
Percentages:            allowed on 'background-position'
Media:                  visual
Computed value:         see individual properties
```

Quirks Mode and IE7 Mode (All Versions)

The **background** property is not supported when the **display** property is set to `table-column-group` or `table-column`.

IE7 Mode (All Versions)

The `inherit` value of the **background** property is not supported.

2.1.74 [CSS-Level2-2009] Section 15.3, Font family: the 'font-family' property

V0144:

The specification states:

```
'font-family'

Value:                  [[ <family-name> | <generic-family> ] [, <family-name>|
<generic-family>]* ] | inherit
Initial:                depends on user agent
Applies to:             all elements
Inherited:              yes
Percentages:            N/A
Media:                  visual
```

```
Computed value:        as specified
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **font-family** property is not supported.

V0145:

The specification states:

```
If an unquoted font family name contains parentheses, brackets, and/or braces, they
must still be escaped per CSS grammar rules. Similarly, quotation marks (both
single and double), semicolons, exclamation marks, commas, and leading slashes
within unquoted font family names must be escaped. Font names containing any such
characters or white space should be quoted:

body { font-family: "New Century Schoolbook", serif }

<BODY STYLE="font-family: 'My own font', fantasy">
```

Quirks Mode and IE7 Mode (All Versions)

An attempt is made to match font-family names that contain the following unescaped characters:

- parentheses ()
- brackets []
- braces {}
- single quotation marks ' '
- double quotation marks " "
- semicolons ;
- exclamation marks !
- leading slashes /

2.1.75 [CSS-Level2-2009] Section 15.7, Font size: the 'font-size' property

V0146:

The specification states:

```
'font-size'

Value:                 <absolute-size> | <relative-size> | <length> | <percentage>
| inherit
Initial:               medium
Applies to:            all elements
Inherited:             yes
Percentages:           refer to parent element's font size
Media:                 visual
```

```
Computed value:        absolute length
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **font-size** property is not supported.

V0147:

The specification states:

```
Negative values are not allowed.
```

Quirks Mode (All Versions)

Negative font-size values are interpreted as `small`.

2.1.76 [CSS-Level2-2009] Section 16.1, Indentation: the 'text-indent' property

V0148:

The specification states:

```
'text-indent'

Value:                 <length> | <percentage> | inherit
Initial:               0
Applies to:            block-level elements, table cells and inline blocks
Inherited:             yes
Percentages:           refer to width of containing block
Media:                 visual
Computed value:        the percentage as specified or the absolute length
```

Quirks Mode and IE7 Mode (All Versions)

The **text-indent** property is applied to the following elements:

- **display:inline**
- **display:table-column**
- **display:table-column-group**

V0149:

The specification states:

```
<percentage>

The indentation is a percentage of the containing block width
```

IE7 Mode (All Versions)

Negative percentages are not supported.

V0150:

The specification states:

```
The value of 'text-indent' may be negative, but there may be implementation-
specific limits. If the value of 'text-indent' is either negative or exceeds the
width of the block, that first box, described above, can overflow the block. The
value of 'overflow' will affect whether such text that overflows the block is
visible.
```

IE7 Mode (All Versions)

Negative percentages are not supported.

2.1.77 [CSS-Level2-2009] Section 16.2, Alignment: the 'text-align' property

V0151:

The specification states:

```
'text-align'

Value:                left | right | center | justify | inherit
Initial:              a nameless value that acts as 'left' if 'direction' is
'ltr', 'right' if 'direction' is 'rtl'
Applies to:           block-level elements, table cells and inline blocks
Inherited:            yes
Percentages:          N/A
Media:                visual
Computed value:       the initial value or as specified
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **text-align** property is not supported.

2.1.78 [CSS-Level2-2009] Section 16.3.1, Underlining, overlining, striking, and blinking: the 'text-decoration' property

V0152:

The specification states:

```
'text-decoration'

Value:                none | [ underline || overline || line-through || blink ] |
inherit
Initial:              none
Applies to:           all elements
Inherited:            no (see prose)
Percentages:          N/A
Media:                visual
Computed value:       as specified
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **text-decoration** property is not supported.

An inline element that has the **text-decoration** property set to `underline` is not underlined.

V0153:

The specification states:

```
This [text-decoration] property describes decorations that are added to the text of
an element using the element's color. When specified on an inline element, it
affects all the boxes generated by that element; for all other elements, the
decorations are propagated to an anonymous inline box that wraps all the in-flow
inline children of the element, and to any block-level in-flow descendants. It is
not, however, further propagated to floating and absolutely positioned descendants,
nor to the contents of 'inline-table' and 'inline-block' descendants.
```

Quirks Mode and IE7 Mode (All Versions)

The following variations apply:

- The **text-decoration** property is incorrectly propagated to floated children and inline-block children.
- **inline-table** elements are not supported.

2.1.79 [CSS-Level2-2009] Section 16.4, Letter and word spacing: the 'letter-spacing' and 'word-spacing' properties

V0154:

The specification states:

```
'letter-spacing'

Value:                  normal | <length> | inherit
Initial:                normal
Applies to:             all elements
Inherited:              yes
Percentages:            N/A
Media:                  visual
Computed value:         'normal' or absolute length
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **letter-spacing** property is not supported.

V0155:

The specification states:

```
Word spacing algorithms are user agent-dependent. Word spacing is also influenced
by justification (see the 'text-align' property). Word spacing affects each space
(U+0020), non-breaking space (U+00A0), and ideographic space (U+3000) left in the
text after the white space processing rules have been applied.
```

Quirks Mode and IE7 Mode (All Versions)

Ideographic spaces are increased with word-spacing even though they should be excluded.

2.1.80 [CSS-Level2-2009] Section 16.5, Capitalization: the 'text-transform' property

V0156:

The specification states:

```
'text-transform'

Value:                capitalize | uppercase | lowercase | none | inherit
Initial:              none
Applies to:           all elements
Inherited:            yes
Percentages:          N/A
Media:                visual
Computed value:       as specified
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **text-transform** property is not supported.

All Document Modes (All Versions)

:first-letter when used in combination with **float** and **text-transform: capitalize** causes the second letter to become capitalized.

The Eszett character (ß) is not rendered as SS after **text-transform: capitalize** is applied.

The **text-transform** property has no effect on characters from the Deseret alphabet.

2.1.81 [CSS-Level2-2009] Section 16.6, Whitespace: the 'white-space' property

V0157:

The specification states:

```
'white-space'

Value:                normal | pre | nowrap | pre-wrap | pre-line | inherit
Initial:              normal
Applies to:           all elements
Inherited:            yes
Percentages:          N/A
Media:                visual
Computed value:       as specified
```

IE7 Mode and Quirks Mode (All Versions)

The `pre-line` and `pre-wrap` values of the **white-space** property are not supported.

2.1.82 [CSS-Level2-2009] Section 16.6.1, The 'white-space' processing model

V0158:

The specification states:

```
1.  Each tab (U+0009), carriage return (U+000D), or space (U+0020) character
surrounding a linefeed (U+000A) character is removed if 'white-space' is set to
'normal', 'nowrap', or 'pre-line'.
```

Quirks Mode and IE7 Mode (All Versions)

The `pre-line` value of the **white-space** property is not supported.

V0159:

The specification states:

```
3.  If a space (U+0020) at the end of a line has 'white-space' set to 'normal',
'nowrap', or 'pre-
line', it is also removed.
```

Quirks Mode and IE7 Mode (All Versions)

White space at the end of the line is not removed.

All Document Modes (All Versions)

The trailing white space of an inline element with a closing border is collapsed to one space (U+0020).

2.1.83 [CSS-Level2-2009] Section 16.6.2, Example of bidirectionality with white space collapsing

V0499:

The specification states:

```
Given the following markup fragment, taking special note of spaces (with varied backgrounds
and borders for emphasis and identification):


     <ltr>A <rtl> B </rtl> C</ltr>

...where the <ltr> element represents a left-to-right embedding and the <rtl> element
represents a right-to-left embedding, and assuming that the 'white-space' property is set to
'normal', the above processing model would result in the following:
The space before the B ( ) would collapse with the space after the A ( ).
The space before the C ( ) would collapse with the space after the B ( ).
This would leave two spaces, one after the A in the left-to-right embedding level, and one
after the B in the right-to-left embedding level. This is then rendered according to the
Unicode bidirectional algorithm, with the end result being:

     A  BC
```

All Document Modes (All Versions)

The Unicode 'RIGHT-TO-LEFT-OVERRIDE' (U+202E) character changes the position of surrounding white space, thus affecting white-space collapsing.

2.1.84 [CSS-Level2-2009] Section 17.1, Introduction to tables

V0160:

The specification states:

```
Authors may specify the visual formatting of a table as a rectangular grid of
cells. Rows and columns of cells may be organized into row groups and column
groups. Rows, columns, row groups, column groups, and cells may have borders drawn
around them (there are two border models in CSS 2.1). Authors may align data
vertically or horizontally within a cell and align data in all cells of a row or
column.
```

Quirks Mode and IE7 Mode (All Versions)

The **border** property is not supported for the following elements:

- table-column
- table-column-group
- table-row
- table-row-group

2.1.85 [CSS-Level2-2009] Section 17.3, Columns

V0161:

The specification states:

```
‘border'

The various border properties apply to columns only if 'border-collapse' is set to
'collapse' on the table element. In that case, borders set on columns and column
groups are input to the conflict resolution algorithm that selects the border
styles at every cell edge.
```

Quirks Mode and IE7 Mode (All Versions)

The **border** properties are not supported for columns and column groups; however, both collapsing and separated border modes are supported.

V0162:

The specification states:

```
'background'

The background properties set the background for cells in the column, but only if
both the cell and row have transparent backgrounds. See "Table layers and
```

```
transparency."
```

Quirks Mode and IE7 Mode (All Versions)

The following variations apply:

- The **background** properties of the display table types `table-column` and `table-column-group` are not supported
- The `table-column` and `table-column-group` values of the display property are not supported.

V0163:

The specification states:

```
'visibility'

If the 'visibility' of a column is set to 'collapse', none of the cells in the
column are rendered, and cells that span into other columns are clipped. In
addition, the width of the table is diminished by the width the column would have
taken up. See "Dynamic effects" below. Other values for 'visibility' have no
effect.
```

Quirks Mode and IE7 Mode (All Versions)

The **visibility** property is not supported for columns and column groups.

2.1.86 [CSS-Level2-2009] Section 17.5.2, Table width algorithms: the 'table-layout' property

V0164:

The specification states:

```
If the margins of a table are set to '0' and the width to 'auto', the table will
not automatically size to fill its containing block. However, once the calculated
value of 'width' for the table is found (using the algorithms given below or, when
appropriate, some other UA dependent algorithm) then the other parts of section
10.3 do apply. Therefore a table can be centered using left and right 'auto'
margins, for instance.
```

Quirks Mode (All Versions)

Centering tables by setting the left and right margin values to `auto` is not supported. The tables will remain left-justified.

V0165:

The specification states:

```
'table-layout'
Value:                  auto | fixed | inherit
Initial:                auto
Applies to:             'table' and 'inline-table' elements
```

```
Inherited:            no
Percentages:          N/A
Media:                visual
Computed value:       as specified
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **table-layout** property is not supported.

2.1.87 [CSS-Level2-2009] Section 17.5.2.1, Fixed table layout

V0166:

The specification states:

```
The table's width may be specified explicitly with the 'width' property. A value of
'auto' (for both 'display: table' and 'display: inline-table') means use the
automatic table layout algorithm. However, if the table is a block-level table
('display: table') in normal flow, a UA may (but does not have to) use the
algorithm of 10.3.3 to compute a width and apply fixed table layout even if the
specified width is 'auto'.
```

Quirks Mode and IE7 Mode (All Versions)

Setting the value of the **width** property to `auto` does not override `table-layout:fixed`. The table will still use fixed layout.

2.1.88 [CSS-Level2-2009] Section 17.5.3, Table height algorithms

V0167:

The specification states:

```
The baseline of a cell is the baseline of the first in-flow line box in the cell,
or the first in-flow table-row in the cell, whichever comes first. If there is no
such line box or table-row, the baseline is the bottom of content edge of the cell
box. For the purposes of finding a baseline, in-flow boxes with a scrolling
mechanisms (see the 'overflow' property) must be considered as if scrolled to their
origin position. Note that the baseline of a cell may end up below its bottom
border, see the example below.
```

Quirks Mode and IE7 Mode (All Versions)

The baseline of a cell with an in-flow table is the bottom of that table's bottom border, rather than the table's first table-row.

2.1.89 [CSS-Level2-2009] Section 17.6.1, The separated borders model

V0168:

The specification states:

```
'border-spacing'
```

```
Value:                <length> <length>? | inherit
Initial:              0
Applies to:           'table' and 'inline-table' elements
Inherited:            yes
Percentages:          N/A
Media:                visual
Computed value:       two absolute lengths
```

Quirks Mode and IE7 Mode (All Versions)

The **border-spacing** property is not supported.

V0169:

The specification states:

```
The distance between the table border and the borders of the cells on the edge of
the table is the table's padding for that side, plus the relevant border spacing
distance. For example, on the right hand side, the distance is padding-right +
horizontal border-spacing. The width of the table is the distance from the left
inner padding edge to the right inner padding edge (including the border spacing
but excluding padding and border). However, in HTML and XHTML1, the width of the
<table> element is the distance from the left border edge to the right border edge.
```

Quirks Mode and IE7 Mode (All Versions)

Cell border spacing and table padding properties are not applied. The table display types are not supported.

2.1.90 [CSS-Level2-2009] Section G.1, Grammar

V0170:

The specification states:

```
nmstart  [_a-z]|{nonascii}|{escape}
nmchar  [_a-z0-9-]|{nonascii}|{escape}
ident  -?{nmstart}{nmchar}*

property: IDENT S*
```

Quirks Mode and IE7 Mode (All Versions)

Property names can be prefixed by one or more of the following characters: !@#$%^&*()_-+=/?.,|[]{:<>

V0171:

The specification states:

```
selector: simple_selector [ combinator selector | S+ [ combinator? selector ]? ]?
```

Quirks Mode and IE7 Mode (All Versions)

The selector `html*` is treated like `html *` and selects all children of the **html** element. Likewise, `**` is treated like `* *` and selects all children of the universal selector.

In addition, `>body` is treated like `*>body` and thus selects the **body** element.

V0172:

The specification states:

```
declaration: property ':' S* expr prio?;prio: IMPORTANT_SYM S*;expr: term [
operator? term ]*
```

Quirks Mode (All Versions)

Property values can be followed by one exclamation point (!) and any sequence of the following characters without causing the rule to be ignored:

- a through z
- A through Z
- 0 through 9
- exclamation point (!)
- at sign (@)
- hash symbol (#)
- dollar sign ($)
- percent (%)
- caret (^)
- ampersand (&)
- asterisk (*)
- parentheses [()]
- underscore (_)
- hyphen (-)
- plus sign (+)
- equals sign (=)
- solidus (/)
- question mark (?)
- period (.)
- comma (,)
- pipe symbol (|)

- square braces ([])
- curly braces ({})
- colon (:)
- angle brackets (<>)

Quirks Mode and IE7 Mode (All Versions)

The **!important** keyword can be followed by one or more of the following nonalphanumeric characters without causing the rule to be ignored:

- exclamation point (!)
- at sign (@)
- hash symbol (#)
- dollar sign ($)
- percent (%)
- caret (^)
- ampersand (&)
- asterisk (*)
- parentheses [()]
- underscore (_)
- hyphen (-)
- plus sign (+)
- equals sign (=)
- solidus (/)
- question mark (?)
- period (.)
- comma (,)
- pipe symbol (|)
- square braces ([])
- curly braces ({})
- colon (:)
- angle brackets (<>)

V0173:

The specification states:

```
selector: simple_selector [ combinator selector | S+ [ combinator? selector ]? ]?
```

Quirks Mode (All Versions)

A comment token following a CSS combinatory prevents the selector from matching.

2.1.91 [CSS-Level2-2009] Section G.2, Lexical scanner

V0174:

The specification states:

```
num  [0-9]+|[0-9]*"."[0-9]+
```

All Document Modes (All Versions)

Lengths can be specified in scientific notation; for example, '5e2p' instead of '500p'. The grammar for the num macro is [0-9]+|[0-9]*\.[0-9]+[e|E [0-9]+].

Quirks Mode and IE7 Mode (All Versions)

Percentages can be specified in scientific notation; for example, '5e2px' instead of '500px'. The grammar for the num macro is [0-9]+|[0-9]*\.[0-9]+[e|E [0-9]+].

2.2 Clarifications

The following subsections identify clarifications to recommendations made by [CSS-Level1-2008] and [CSS-Level2-2009].

2.2.1 [CSS-Level2-2009] Section 4.1.3, Characters and case

V0175:

The specification states:

```
All CSS syntax is case-insensitive within the ASCII range (i.e., [a-z] and [A-Z]
are equivalent), except for parts that are not under the control of CSS. For
example, the case-sensitivity of values of the HTML attributes "id" and "class", of
font names, and of URIs lies outside the scope of this specification. Note in
particular that element names are case-insensitive in HTML, but case-sensitive in
XML.
```

Quirks Mode (All Versions)

id, **class**, and attribute selector matching is case-insensitive and does not respect the HTML 4.01 case sensitivity.

V0176:

The specification states:

```
In CSS, identifiers (including element names, classes, and IDs in selectors) can
contain only the characters [a-zA-Z0-9] and ISO 10646 characters U+00A1 and higher,
plus the hyphen (-) and the underscore (_); they cannot start with a digit, or a
```

```
hyphen followed by a digit. Identifiers can also contain escaped characters and any
ISO 10646 character as a numeric code (see next item). For instance, the identifier
"B&W?" may be written as "B\&W\?" or "B\26 W\3F".
```

Quirks Mode and IE7 Mode (All Versions)

Attribute selectors can begin with digits.

V0177:

The specification states:

```
First, inside a string, a backslash followed by a newline is ignored (i.e., the
string is deemed not to contain either the backslash or the newline).
```

Quirks Mode and IE7 Mode (All Versions)

Strings with escaped newline characters are not treated as single whole strings.

V0178:

The specification states:

```
Third, backslash escapes allow authors to refer to characters they cannot easily
put in a document. In this case, the backslash is followed by at most six
hexadecimal digits (0..9A..F), which stand for the ISO 10646 ([ISO-10646])
character with that number, which must not be zero. (It is undefined in CSS 2.1
what happens if a style sheet does contain a character with Unicode codepoint
zero.) If a character in the range [0-9a-fA-F] follows the hexadecimal number, the
end of the number needs to be made clear. There are two ways to do that:

1. with a space (or other white space character): "\26 B" ("&B"). In this case,
user agents should treat a "CR/LF" pair (U+000D/U+000A) as a single white space
character.

2. by providing exactly 6 hexadecimal digits: "\000026B" ("&B")

In fact, these two methods may be combined. Only one white space character is
ignored after a hexadecimal escape. Note that this means that a "real" space after
the escape sequence must itself either be escaped or doubled.
```

Quirks Mode and IE7 Mode (All Versions)

Escaped character sequences (less than six hex digits) that are terminated by tabs and line feed characters are not supported.

2.2.2 [CSS-Level2-2009] Section 4.1.5, At-rules

V0179:

The specification states:

```
At-rules start with an at-keyword, an '@' character followed immediately by an
identifier (for example, '@import', '@page').
```

Quirks Mode and IE7 Mode (All Versions)

At-rules that start with the at character (@) followed immediately by spaces, tabs, numbers, dashes, or other special characters are ignored and do not allow the actual keyword command to be executed.

2.2.3 [CSS-Level2-2009] Section 4.1.6, Blocks

V0180:

The specification states:

```
A block starts with a left curly brace ({) and ends with the matching right curly
brace (}). In between there may be any tokens, except that parentheses (( )),
brackets ([ ]), and braces ({ }) must always occur in matching pairs and may be
nested. Single (') and double quotes (") must also occur in matching pairs, and
characters between them are parsed as a string. See Tokenization above for the
definition of a string.
```

Quirks Mode and IE7 Mode (All Versions)

The following variations apply:

- Nested blocks and strings are not parsed correctly.
- Blocks and strings with terminating pairs that do not exist or are not matched are ignored.
- Blocks and strings with matching terminating pairs of square brackets are parsed; the brackets do not affect the parsing of the rule.

IE8 Mode and IE9 Mode (All Versions)

- Parsing is interrupted when a block, a curly brace, or a parenthesis is encountered before the body of the rule is completely defined after the first curly brace of the rule.

2.2.4 [CSS-Level2-2009] Section 4.1.7, Rule sets, declaration blocks, and selectors

V0181:

The specification states:

```
The selector (see also the section on selectors) consists of everything up to (but
not including) the first left curly brace ({). A selector always goes together with
a declaration block. When a user agent cannot parse the selector (i.e., it is not
valid CSS 2.1), it must ignore the selector and the following declaration block (if
any) as well.
```

Quirks Mode and IE7 Mode (All Versions)

Bad or empty selectors are not ignored.

V0182:

The specification states:

```
CSS 2.1 gives a special meaning to the comma (,) in selectors. However, since it is
not known if the comma may acquire other meanings in future updates of CSS, the
whole statement should be ignored if there is an error anywhere in the selector,
even though the rest of the selector may look reasonable in CSS 2.1.
```

Quirks Mode and IE7 Mode (All Versions)

Bad selector declarations are not ignored.

2.2.5 [CSS-Level2-2009] Section 4.1.8, Declarations and properties

V0183:

The specification states:

```
A declaration is either empty or consists of a property name, followed by a colon
(:), followed by a value. Around each of these there may be white space.
```

Quirks Mode and IE7 Mode (All Versions)

Bad selector declarations are not ignored.

V0184:

The specification states:

```
A user agent must ignore a declaration with an invalid property name or an invalid
value. Every CSS 2.1 property has its own syntactic and semantic restrictions on
the values it accepts.
```

Quirks Mode and IE7 Mode (All Versions)

Invalid values are not ignored and cause the rule to fail. Such invalid values include spaces, slashes, and valid keywords. Invalid values that are functions are also included.

2.2.6 [CSS-Level2-2009] Section 4.2, Rules for handling parsing errors

V0185:

The specification states:

```
Malformed declarations. User agents must handle unexpected tokens encountered while
parsing a declaration by reading until the end of the declaration, while observing
the rules for matching pairs of (), [], {}, "", and '', and correctly handling
escapes. For example, a malformed declaration may be missing a property, colon (:),
or value. The following are all equivalent:

p { color:green }
p { color:green; color }  /* malformed declaration missing ':', value */
p { color:red;   color; color:green }  /* same with expected recovery */
p { color:green; color: } /* malformed declaration missing value */
p { color:red;   color:; color:green } /* same with expected recovery */
p { color:green; color{;color:maroon} } /* unexpected tokens { } */
```

```
p { color:red;   color{;color:maroon}; color:green } /* same with recovery */
```

Quirks Mode (All Versions)

The following variations apply:

- Malformed rules with a semicolon before a property are not ignored.
- Nested malformed declarations are applied, while the correct rules that follow the declaration are ignored.

Quirks Mode and IE7 Mode (All Versions)

Blocks and strings are parsed without matching terminating pairs.

V0186:

The specification states:

```
Unexpected end of style sheet

User agents must close all open constructs (for example: blocks, parentheses,
brackets, rules, strings, and comments) at the end of the style sheet.
```

Quirks Mode and IE7 Mode (All Versions)

Open parentheses, open strings, and open rules are not closed at the end of the style sheet.

V0187:

The specification states:

```
Unexpected end of string

User agents must close strings upon reaching the end of a line, but then drop the
construct (declaration or rule) in which the string was found.
```

Quirks Mode and IE7 Mode (All Versions)

The parser drops the rule when it encounters an unterminated string and does not continue to the next semicolon (;).

2.2.7 [CSS-Level2-2009] Section 4.3.2, Lengths

C0001:

The specification states:

```
The x-height of a font can be found in different ways. Some fonts contain reliable
metrics for the x-height. If reliable font metrics are not available, UAs may
determine the x-height from the height of a lowercase glyph. One possible heuristic
is to look at how far the glyph for the lowercase "o" extends below the baseline,
and subtract that value from the top of its bounding box. In the cases where it is
impossible or impractical to determine the x-height, a value of 0.5em should be
```

```
used.
```

Quirks Mode and IE7 Mode (All Versions)

The x-height of a font is always equal to 0.5 em.

IE8 Mode and IE9 Mode (All Versions)

The x-height is computed from font metrics and varies by font.

C0002:

The specification states:

```
Pixel units are relative to the resolution of the viewing device, i.e., most often
a computer display. If the pixel density of the output device is very different
from that of a typical computer display, the user agent should rescale pixel
values. It is recommended that the pixel unit refer to the whole number of device
pixels that best approximates the reference pixel. It is recommended that the
reference pixel be the visual angle of one pixel on a device with a pixel density
of 96dpi and a distance from the reader of an arm's length. For a nominal arm's
length of 28 inches, the visual angle is therefore about 0.0213 degrees.
```

All Document Modes (All Versions)

The "px" unit always equals 1/96 of the "in" unit, regardless of the physical resolution of the viewing device. However, Internet Explorer allows the user to zoom the page display size up or down. This changes the relationship between logical CSS pixels and physical pixels. For example, at 100 percent zoom, 1 CSS pixel equals 1 display device pixel, and at 125 percent zoom, 1 CSS pixel equals 1.25 device pixels. When printing, 1 CSS pixel equals 1/96 inch and is then converted to the actual output device resolution. For example, if the printer's resolution is 600dpi, 1 CSS pixel equals 6.25 device pixels and 1 CSS inch equals 600 device pixels.

2.2.8 [CSS-Level2-2009] Section 4.3.4, URLs and URIs

V0188:

The specification states:

```
The format of a URI value is 'url(' followed by optional white space followed by an
optional single quote (') or double quote (") character followed by the URI itself,
followed by an optional single quote (') or double quote (") character followed by
optional white space followed by ')'. The two quote characters must be the same.
```

Quirks Mode and IE7 Mode (All Versions)

Spaces are incorrectly allowed between a function name (such as URL) and the opening parenthesis.

V0189:

The specification states:

```
Some characters appearing in an unquoted URI, such as parentheses, commas, white
space characters, single quotes (') and double quotes ("), must be escaped with a
```

```
backslash so that the resulting URI value is a URI token: '\(', '\)', '\,'.
```

Quirks Mode and IE7 Mode (All Versions)

The ability to escape characters with a backslash in a URI is not supported.

2.2.9 [CSS-Level2-2009] Section 4.3.5, Counters

V0190:

The specification states:

```
Counters are denoted by case-sensitive identifiers (see the 'counter-increment' and
'counter-reset' properties). To refer to the value of a counter, the notation
'counter(<identifier>)' or 'counter(<identifier>, <'list-style-type'>)', with
optional white space separating the tokens, is used. The default style is
'decimal'.
```

Quirks Mode and IE7 Mode (All Versions)

The **counters** property is not supported.

2.2.10 [CSS-Level2-2009] Section 4.3.6, Colors

V0191:

The specification states:

```
The format of an RGB value in the functional notation is 'rgb(' followed by a
comma-separated list of three numerical values (either three integer values or
three percentage values) followed by ')'. The integer value 255 corresponds to
100%, and to F or FF in the hexadecimal notation: rgb(255,255,255) =
rgb(100%,100%,100%) = #FFF. White space characters are allowed around the numerical
values.
```

Quirks Mode and IE7 Mode (All Versions)

The RGB value allows both percentages and numbers in the notation.

2.2.11 [CSS-Level2-2009] Section 4.3.7, Strings

V0192:

The specification states:

```
Strings can either be written with double quotes or with single quotes. Double
quotes cannot occur inside double quotes, unless escaped (e.g., as '\"' or as
'\22'). Analogously for single quotes (e.g., "\'" or "\27").

Example(s):
"this is a 'string'"
"this is a \"string\""
'this is a "string"'
```

```
'this is a \'string\''
```

Quirks Mode and IE7 Mode (All Versions)

The following variations apply:

- Strings written with double quotation marks or with single quotation marks are not supported.
- Strings that have escaped double quotation marks inside double quotation marks are not supported.
- Strings that have escaped single quotation marks inside single quotation marks are not supported.

V0193:

The specification states:

```
A string cannot directly contain a newline. To include a newline in a string, use an
escape representing the line feed character in ISO-10646 (U+000A), such as "\A" or
"\00000a". This character represents the generic notion of "newline" in CSS.
```

Quirks Mode and IE7 Mode (All Versions)

Strings with escaped newlines are not supported.

2.2.12 [CSS-Level2-2009] Section 5.11.3, The dynamic pseudo-classes: :hover, :active, and :focus

V0194:

The specification states:

```
Interactive user agents sometimes change the rendering in response to user actions.
CSS provides three pseudo-classes for common cases:

The :hover pseudo-class applies while the user designates an element (with some
pointing device), but does not activate it. For example, a visual user agent could
apply this pseudo-class when the cursor (mouse pointer) hovers over a box generated
by the element. User agents not supporting interactive media do not have to support
this pseudo-class. Some conforming user agents supporting interactive media may not
be able to support this pseudo-class (e.g., a pen device).

The :active pseudo-class applies while an element is being activated by the user.
For example, between the times the user presses the mouse button and releases it.

The :focus pseudo-class applies while an element has the focus (accepts keyboard
events or other forms of text input).
```

Quirks Mode and IE7 Mode (All Versions)

The :**focus** and **:active** pseudo-classes are not supported for any elements other than **<a>**.

All Document Modes (All Versions)

The **:hover** pseudo-class applies to an element only when the mouse pointer is hovering over the content of that element's box.

2.2.13 [CSS-Level2-2009] Section 5.12.2, The :first-letter pseudo-element

C0003:

The specification states:

```
If an element is a list item ('display: list-item'), the ':first-letter' applies to
the first letter in the principal box after the marker. UAs may ignore ':first-
letter' on list items with 'list-style-position: inside'. If an element has
':before' or ':after' content, the ':first-letter applies to the first letter of
the element including that content.
E.g., after the rule 'p:before {content: "Note: "}', the selector 'p:first-letter'
matches the "N" of "Note".
```

All Document Modes (All Versions)

The **:first-letter** pseudo-class is not ignored on list items with `list-style-position:inside`.

C0004:

The specification states:

```
If the letters that would form the first-letter are not in the same element, such
as "'T" in <p>'<em>T..., the UA may create a first-letter pseudo-element from one
of the elements, both elements, or simply not create a pseudo-element.
```

Quirks Mode and IE7 Mode (All Versions)

The **:first-letter** pseudo-element is created from the first two elements. The following example results in "T", where the first quotation mark and the T are green:

```
<style type="text/css">

 div:first-letter

 {

 color: green;

 }

 </style>

 </head>

 <body>

 <div>"<em>T</em>"</div>

 </body>
```

IE8 Mode and IE9 Mode (All Versions)

The **:first-letter** pseudo-element is created only from the first element. The following example results in "T", where only the first quotation mark is green:

```
<style type="text/css">

 div:first-letter

 {

 color: green;

 }

 </style>

 </head>

 <body>

 <div>"<em>T</em>"</div>

 </body>
```

C0005:

The specification states:

```
Similarly, if the first letter(s) of the block are not at the start of the line
(for example due to bidirectional reordering), then the UA need not create the
pseudo-element(s).
```

All Document Modes (All Versions)

The **:first-letter** pseudo-element is created for right-to-left (RTL).

2.2.14 [CSS-Level2-2009] Section 6.2.1, The 'inherit' value

V0195:

The specification states:

```
If the 'inherit' value is set on the root element, the property is assigned its
initial value.
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value is supported only for the **direction** property and the **visibility** property.

2.2.15 [CSS-Level2-2009] Section 7.3, Recognized media types

C0006:

The specification states:

```
Braille
```

```
Intended for Braille tactile feedback devices.
```

All Document Modes (All Versions)

The `braille` media value is recognized, but a Braille mode is not supported.

V0196:

The specification states:

```
Embossed

Intended for paged Braille printers.
```

All Document Modes (All Versions)

The `embossed` media value is recognized, but embossed media is not supported.

C0007:

The specification states:

```
Projection

Intended for projected presentations, for example projectors. Please consult the
section on paged media for information about formatting issues that are specific to
paged media.
```

All Document Modes (All Versions)

The `projection` media value is recognized, but a projection mode is not supported.

C0008:

The specification states:

```
Speech

Intended for speech synthesizers. Note: CSS2 had a similar media type called
'aural' for this purpose. See the appendix on aural style sheets for details.
```

All Document Modes (All Versions)

The `speech` media value is recognized, but a speech mode is not supported.

C0009:

The specification states:

```
tty

Intended for media using a fixed-pitch character grid (such as teletypes,
terminals, or portable devices with limited display capabilities). Authors should
```

```
not use pixel units with the "tty" media type.
```

All Document Modes (All Versions)

The `tty` media value is recognized, but a tty media mode is not supported.

C0010:

The specification states:

```
tv

Intended for television-type devices (low resolution, color, limited-scrollability
screens, sound available).
```

All Document Modes (All Versions)

The `tv` media value is recognized, but a tv media mode is not supported.

2.2.16 [CSS-Level2-2009] Section 8.3.1, Collapsing margins

C0011:

The specification states:

```
Two or more adjoining vertical margins of block boxes in the normal flow collapse.
The resulting margin width is the maximum of the adjoining margin widths. In the
case of negative margins, the maximum of the absolute values of the negative
adjoining margins is deducted from the maximum of the positive adjoining margins.
If there are no positive margins, the absolute maximum of the negative adjoining
margins is deducted from zero. Note. Adjoining boxes may be generated by elements
that are not related as siblings or ancestors.
```

Quirks Mode and IE7 Mode (All Versions)

Adjoining vertical margins of block boxes do not collapse.

C0012:

The specification states:

```
Vertical margins between a floated box and any other box do not collapse (not even
between a float and its in-flow children).
```

Quirks Mode (All Versions)

The vertical margins between a floated box and any other box do collapse.

C0013:

The specification states:

```
Vertical margins of elements that establish new block formatting contexts (such as
```

```
floats and elements with 'overflow' other than 'visible') do not collapse with
their in-flow children.
```

Quirks Mode and IE7 Mode (All Versions)

An element with **overflow** set to `visible` collapses with its in-flow children.

C0014:

The specification states:

```
Margins of inline-block elements do not collapse (not even with their in-flow
children).
```

Quirks Mode and IE7 Mode (All Versions)

The margins of sibling inline-block elements do collapse.

V0197:

The specification states:

```
The top margin of an in-flow block-level element is adjoining to its first in-flow
block-level child's top margin if the element has no top border, no top padding,
and the child has no clearance.
```

Quirks Mode and IE7 Mode (All Versions)

Margins do not collapse under the specified conditions.

V0198:

The specification states:

```
An element's own margins are adjoining if the 'min-height' property is zero, and it
has neither top or bottom borders nor top or bottom padding, and it has a 'height'
of either 0 or 'auto', and it does not contain a line box, and all of its in-flow
children's margins (if any) are adjoining.
```

Quirks Mode and IE7 Mode (All Versions)

An element’s own margins do not collapse under the specified conditions.

V0199:

The specification states:

```
When an element's own margins collapse, and that element has had clearance applied
to it, its top margin collapses with the adjoining margins of subsequent siblings
but that resulting margin does not collapse with the bottom margin of the parent
block.
```

Quirks Mode and IE7 Mode (All Versions)

An element's top margin does not collapse with the adjoining margins of subsequent siblings when clearance is applied to it.

V0200:

The specification states:

```
Collapsing is based on the used value of 'padding', 'margin', and 'border' (i.e.,
after resolving any percentages). The collapsed margin is calculated over the used
value of the various margins.
```

Quirks Mode and IE7 Mode (All Versions)

Collapsing is not based on the used value of **padding**, **margin**, and **border**; if these properties are specified in percentage units that evaluate to 0, the margins do not collapse.

2.2.17 [CSS-Level2-2009] Section 8.4, Padding properties: 'padding-top', 'padding-right', 'padding-bottom', 'padding-left', and 'padding'

V0201:

The specification states:

```
'padding-top', 'padding-right', 'padding-bottom', 'padding-left'

Value:                <padding-width> | inherit
Initial:              0
Applies to:           all elements except table-row-group, table-header-group,
table-footer-group, table-row, table-column-group and table-column
Inherited:            no
Percentages:          refer to width of containing block
Media:                visual
Computed value:       the percentage as specified or the absolute length

These properties set the top, right, bottom, and left padding of a box.
```

Quirks Mode and IE7 Mode (All Versions)

The following clarifications apply:

- The `inherit` value of the **padding** properties is not supported.
- The **padding** properties apply to the following elements:
- **table-row-group**
- **table-header-group**
- **table-footer-group**
- **table-row**
- **table-column-group**
- **table-column**

Quirks Mode and IE7 Mode (All Versions)

A child block element of an inline element incorrectly inherits the background and border of its parent.

IE8 Mode (All Versions)

Inline element padding is lost after a line break.

2.2.18 [CSS-Level2-2009] Section 8.5.1, Border width: 'border-top-width', 'border-right-width', 'border-bottom-width', 'border-left-width', and 'border-width'

V0202:

The specification states:

```
'border-top-width', 'border-right-width', 'border-bottom-width', 'border-left-width'

Value:                <border-width> | inherit
Initial:              medium
Applies to:           all elements
Inherited:            no
Percentages:          N/A
Media:                visual
Computed value:       absolute length; '0' if the border style is 'none' or
'hidden'

These properties set the width of the top, right, bottom, and left border of a box.
```

IE7 Mode (All Versions)

The **border-bottom-width** property will clip the bottom content edge of the inline elements.

2.2.19 [CSS-Level2-2009] Section 8.5.2, Border color: 'border-top-color', 'border-right-color', 'border-bottom-color', 'border-left-color', and 'border-color'

V0203:

The specification states:

```
The border color properties specify the color of a box's border.

'border-top-color', 'border-right-color', 'border-bottom-color', 'border-left-color'

Value:                <color> | transparent | inherit
Initial:              the value of the 'color' property
Applies to:           all elements
Inherited:            no
Percentages:          N/A
Media:                visual
Computed value:       when taken from the 'color' property, the computed value of
'color'; otherwise, as specified
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **border color** properties is not supported.

2.2.20 [CSS-Level2-2009] Section 8.5.3, Border style: 'border-top-style', 'border-right-style', 'border-bottom-style', 'border-left-style', and 'border-style'

V0204:

The specification states:

```
none

No border; the computed border width is zero.
```

All Document Modes (All Versions)

When the **border-style**, **border-bottom-style**, **border-left-style**, **border-right-style**, and **border-top-style** properties are set to `none`, the **borderWidth**, **borderBottomWidth**, **borderLeftWidth**, **borderRightWidth**, and **borderTopWidth** are not set to zero, respectively.

V0205:

The specification states:

```
Hidden

Same as 'none', except in terms of border conflict resolution for table elements.
```

All Document Modes (All Versions)

When the **border-style**, **border-bottom-style**, **border-left-style**, **border-right-style**, and **border-top-style** properties are set to `hidden`, the **borderWidth**, **borderBottomWidth**, **borderLeftWidth**, **borderRightWidth**, and **borderTopWidth** properties are not set to zero, respectively.

2.2.21 [CSS-Level2-2009] Section 9.3.1, Choosing a positioning scheme: 'position' property

C0015:

The specification states:

```
User agents may treat position as 'static' on the root element.
```

Quirks Mode and IE7 Mode (All Versions)

The user agent cannot change positioning to anything other than `static` in these modes.

2.2.22 [CSS-Level2-2009] Section 9.4.2, Inline formatting context

V0206:

The specification states:

```
A line box is always tall enough for all of the boxes it contains. However, it may
be taller than the tallest box it contains (if, for example, boxes are aligned so
that baselines line up). When the height of a box B is less than the height of the
line box containing it, the vertical alignment of B within the line box is
determined by the 'vertical-align' property. When several inline boxes cannot fit
horizontally within a single line box, they are distributed among two or more
vertically-stacked line boxes. Thus, a paragraph is a vertical stack of line boxes.
Line boxes are stacked with no vertical separation and they never overlap.
```

Quirks Mode and IE7 Mode (All Versions)

The following clarifications apply:

- When the height of the inner box is less than the height of the line box containing it, the height of the inner box is clipped and is not preserved.
- Characters are not placed in the center of the inner box when they are displayed, but are clipped from the bottom up.

2.2.23 [CSS-Level2-2009] Section 9.5.1, Positioning the float: the 'float' property

V0207:

The specification states:

```
[The float] property specifies whether a box should float to the left, right, or
not at all. It may be set for any element, but only applies to elements that
generate boxes that are not absolutely positioned.
```

Quirks Mode and IE7 Mode (All Versions)

The **float** property is incorrectly applied to absolutely positioned elements.

V0208:

The specification states:

```
4. A floating box's outer top may not be higher than the top of its containing
block. When the float occurs between two collapsing margins, the float is
positioned as if it had an otherwise empty anonymous block parent taking part in
the flow. The position of such a parent is defined by the rules in the section on
margin collapsing.
```

Quirks Mode and IE7 Mode (All Versions)

A floated element that occurs between two margins that would otherwise collapse prevents the margin from collapsing.

2.2.24 [CSS-Level2-2009] Section 9.6, Absolute positioning

V0209:

The specification states:

```
However, the contents of an absolutely positioned element do not flow around any
other boxes.
```

Quirks Mode and IE7 Mode (All Versions)

An absolutely positioned element does flow around other boxes.

2.2.25 [CSS-Level2-2009] Section 9.7, Relationships between 'display', 'position', and 'float'

V0210:

The specification states:

```
The three properties that affect box generation and layout — 'display', 'position',
and 'float' — interact as follows:

If 'display' has the value 'none', then 'position' and 'float' do not apply. In
this case, the element generates no box.
Otherwise, if 'position' has the value 'absolute' or 'fixed', the box is absolutely
positioned, the computed value of 'float' is 'none', and display is set according
to the table below. The position of the box will be determined by the 'top',
'right', 'bottom' and 'left' properties and the box's containing block.
Otherwise, if 'float' has a value other than 'none', the box is floated and
'display' is set according to the table below.
Otherwise, if the element is the root element, 'display' is set according to the
table below.
Otherwise, the remaining 'display' property values apply as specified.
```

Quirks Mode (All Versions)

The `fixed` value of the **position** property is not supported.

2.2.26 [CSS-Level2-2009] Section 10.1, Definition of "containing block"

V0211:

The specification states:

```
For other elements, if the element's position is 'relative' or 'static', the
containing block is formed by the content edge of the nearest block-level, table
cell or inline-block ancestor box.
```

Quirks Mode and IE7 Mode (All Versions)

When the position is `static`, the containing block is not formed by the content edge of the nearest block-level ancestor.

V0212:

The specification states:

```
If the element has 'position: fixed', the containing block is established by the
viewport in the case of continuous media or the page area in the case of paged
```

```
media.
```

Quirks Mode (All Versions)

The **position: fixed** element is not supported.

V0213:

The specification states:

```
If the element has 'position: absolute', the containing block is established by the
nearest ancestor with a 'position' of 'absolute', 'relative' or 'fixed', in the
following way:

1. In the case that the ancestor is inline-level, the containing block depends on
the 'direction' property of the ancestor:
1. If the 'direction' is 'ltr', the top and left of the containing block are the top and left
padding edges of the first box generated by the ancestor, and the bottom and right are the
bottom and right padding edges of the last box of the ancestor.

2. If the 'direction' is 'rtl', the top and right are the top and right
padding edges of the first box generated by the ancestor, and the bottom and left are the
bottom and left padding edges of the last box of the ancestor.

Note: This may cause the containing block's width to be negative.
2. Otherwise, the containing block is formed by the padding edge of the ancestor.
```

Quirks Mode (All Versions)

None of these statements are supported.

2.2.27 [CSS-Level2-2009] Section 10.2, Content width: the 'width' property

V0214:

The specification states:

```
'width'

Value:                  <length> | <percentage> | auto | inherit
Initial:                auto
Applies to:             all elements but non-replaced inline elements, table rows,
and row groups
Inherited:              no
Percentages:            refer to width of containing block
Media:                  visual
Computed value:         the percentage or 'auto' as specified or the absolute
length; 'auto' if the property does not apply

This property specifies the content width of boxes generated by block-level and
replaced elements.
```

Quirks Mode (All Versions)

The **width** property does apply to elements that have the **display** property set to `inline`.

Quirks Mode and IE7 Mode (All Versions)

The **width** property does apply to elements that have the **display** property set to `table-row-group`, `table-header-group`, `table-footer-group`, `table-row`, `table-column-group`, or `table-column`.

V0215:

The specification states:

```
This property does not apply to non-replaced inline-level elements. The content
width of a non-replaced inline element's boxes is that of the rendered content
within them (before any relative offset of children).
```

Quirks Mode (All Versions)

The **width** property does apply to elements that have the **display** property set to `inline`.

2.2.28 [CSS-Level2-2009] Section 10.3.3, Block-level, non-replaced elements in normal flow

V0216:

The specification states:

```
The following constraints must hold among the used values of the other properties:
'margin-left' + 'border-left-width' + 'padding-left' + 'width' + 'padding-right' +
'border-right-width' + 'margin-right' = width of containing block
```

Quirks Mode (All Versions)

The box model does not meet this constraint.

V0217:

The specification states:

```
If there is exactly one value specified as 'auto', its used value follows from the
equality.
```

Quirks Mode (All Versions)

The box model does not respect the inequality defined in this section.

V0218:

The specification states:

```
If both 'margin-left' and 'margin-right' are 'auto', their used values are equal.
This horizontally centers the element with respect to the edges of the containing
block.
```

Quirks Mode (All Versions)

When both **margin-left** and **margin-right** are `auto`, **margin-left** takes precedence when in RTL, and **margin-right** takes precedence when in LTR. This, in effect, consumes all of the available margin space that should be distributed equally between **margin-left** and **margin-right**.

2.2.29 [CSS-Level2-2009] Section 10.3.4, Block-level, replaced elements in normal flow

V0219:

The specification states:

```
The used value of 'width' is determined as for inline replaced elements. Then the
rules for non-replaced block-level elements are applied to determine the margins.
```

Quirks Mode (All Versions)

This section references [CSS-Level2-2009] Section 10.3.3 for margin calculation, and the equality presented in that section is not supported; therefore, this section's requirement to match the defined behavior for Section 10.3.3 is also not supported.

2.2.30 [CSS-Level2-2009] Section 10.3.6, Floating, replaced elements

V0220:

The specification states:

```
If 'margin-left' or 'margin-right' are computed as 'auto', their used value is '0'.
The used value of 'width' is determined as for inline replaced elements.
```

Quirks Mode (All Versions)

Floating replaced elements are offset by 3px and not by 0px.

2.2.31 [CSS-Level2-2009] Section 10.3.7, Absolutely positioned, non-replaced elements

C0016:

The specification states:

```
Otherwise, set 'auto' values for 'margin-left' and 'margin-right' to 0, and pick
the one of the following six rules that applies.
1. 'left' and 'width' are 'auto' and 'right' is not 'auto', then the width is
shrink-to-fit. Then solve for 'left'
2. 'left' and 'right' are 'auto' and 'width' is not 'auto', then if the 'direction'
property of the element establishing the static-position containing block is 'ltr'
set 'left' to the static position, otherwise set 'right' to the static position.
Then solve for 'left' (if 'direction is 'rtl') or 'right' (if 'direction' is
'ltr').
3. 'width' and 'right' are 'auto' and 'left' is not 'auto', then the width is
shrink-to-fit . Then solve for 'right'
4. 'left' is 'auto', 'width' and 'right' are not 'auto', then solve for 'left'
5. 'width' is 'auto', 'left' and 'right' are not 'auto', then solve for 'width'
6. 'right' is 'auto', 'left' and 'width' are not 'auto', then solve for 'right'
```

Quirks Mode (All Versions)

The specified border of the containing block is incorrectly included in the specified width of the block when one of the following is true:

- The value of **border-right** is `auto`, as in Rules 3 and 6.
- The value of **border-left** is `auto`, as in Rules 1 and 4.

The border should not be part of the specified width.

2.2.32 [CSS-Level2-2009] Section 10.4, Minimum and maximum widths: 'min-width' and 'max-width'

V0221:

The specification states:

```
'min-width'

Value:                <length> | <percentage> | inherit
Initial:              0
Applies to:           all elements but non-replaced inline elements, table rows,
and row groups
Inherited:            no
Percentages:          refer to width of containing block
Media:                visual
Computed value:       the percentage as specified or the absolute length
```

All Document Modes (All Versions)

The **min-width** property is not supported for elements that have the **display** property set to `table-column-group`.

Quirks Mode (All Versions)

The **min-width** property is not supported for table cells or for elements that have the **display** property set to one of the following values:

- `block`
- `list-item`
- `run-in`
- `inline-block`
- `table-cell`
- `table`
- `inline-table`
- `table-caption`

Quirks Mode, IE7 Mode, and IE8 Mode (All Versions)

The **min-width** property is not supported for elements that have the **display** property set to `table-column`.

IE7 Mode (All Versions)

The **min-width** property is supported for elements that have the **display** property set to one of the following values:

- `table-row-group`
- `table-header-group`
- `table-footer group`
- `table-row`

V0222:

The specification states:

```
'max-width'

Value:                <length> | <percentage> | none | inherit
Initial:              none
Applies to:           all elements but non-replaced inline elements, table rows,
and row groups
Inherited:            no
Percentages:          refer to width of containing block
Media:                visual
Computed value:       the percentage as specified or the absolute length or 'none'

These two properties allow authors to constrain content widths to a certain range.
```

All Document Modes (All Versions)

The **max-width** property is not supported for elements that have the **display** property set to the following:

- `table-column`
- `table-column-group`

Quirks Mode (All Versions)

The **max-width** property is not supported for elements that have the **display** property set to the following:

- `block`
- `list-item`
- `run-in`
- `inline-block`
- `table`
- `inline-table`

- `table-caption`
- `table-cell`

IE7 Mode (All Versions)

The **max-width** property is supported for elements with the **display** property set to the following:

- `table-row-group`
- `table-header-group`
- `table-footer-group`
- `table-row`

V0223:

The specification states:

```
<percentage>

Specifies a percentage for determining the used value. The percentage is calculated
with respect to the width of the generated box's containing block. If the
containing block's width is negative, the used value is zero. If the containing
block's width depends on this element's width, then the resulting layout is
undefined in CSS 2.1.
```

Quirks Mode (All Versions)

The `percentage` value of the **min-width** and the **max-width** properties is not supported.

V0224:

The specification states:

```
Negative values for 'min-width' and 'max-width' are illegal.
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **min-width** and **max-width** properties is not supported.

Quirks Mode (All Versions)

The **min-width** and **max-width** properties are not supported; therefore specific values (or restrictions on values) are also not supported.

V0225:

The specification states:

```
The following algorithm describes how the two properties influence the used value
of the 'width' property:

The tentative used width is calculated (without 'min-width' and 'max-width')
following the rules under "Calculating widths and margins" above.
If the tentative used width is greater than 'max-width', the rules above are
```

```
applied again, but this time using the computed value of 'max-width' as the
computed value for 'width'.
If the resulting width is smaller than 'min-width', the rules above are applied
again, but this time using the value of 'min-width' as the computed value for
'width'.

These steps do not affect the real computed values of the above properties.
```

Quirks Mode (All Versions)

The **min-width** and the **max-width** properties are not supported.

V0226:

The specification states:

```
However, for replaced elements with an intrinsic ratio and both 'width' and
'height' specified as 'auto', the algorithm is as follows:

Select from the table the resolved height and width values for the appropriate
constraint violation. Take the max-width and max-height as max(min, max) so that
min ≤ max holds true. In this table w and h stand for the results of the width and
height computations ignoring the 'min-width', 'min-height', 'max-width' and 'max-
height' properties. Normally these are the intrinsic width and height, but they may
not be in the case of replaced elements with intrinsic ratios.

Note: In cases where an explicit width or height is set and the other dimension is
auto, applying a minimum or maximum constraint on the auto side can cause an over-
constrained situation. The spec is clear in the behavior but it might not be what
the author expects. The CSS3 image-fit property can be used to obtain different
results in this situation.

[SEE SPECIFICATIONS FOR THE TABLE]

Then apply the rules under "Calculating widths and margins" above, as if 'width'
were computed as this value.
```

Quirks Mode (All Versions)

The following clarifications apply:

- The **min-height** and **max-height** properties are not supported.
- The rules that are captured in the table in this section are applied if the **width** OR the **height** values are set to `auto`, rather than only when BOTH values are set to `auto`.

2.2.33 [CSS-Level2-2009] Section 10.5, Content height: the 'height' property

V0227:

The specification states:

```
'height'

Value:                  <length> | <percentage> | auto | inherit
Initial:                auto
```

```
Applies to:            all elements but non-replaced inline elements, table
columns, and column groups
Inherited:             no
Percentages:           see prose
Media:                 visual
Computed value:        the percentage or 'auto' (see prose under <percentage>) or
the absolute length; 'auto' if the property does not apply

This property specifies the content height of boxes generated by block-level,
inline-block and replaced elements.
This property does not apply to non-replaced inline-level elements. See the section
on computing heights and margins for non-replaced inline elements for the rules
used instead.
```

Quirks Mode and IE7 Mode (All Versions)

The **height** property is not applied to elements that have the **display** property set to `table-row`, `table`, `inline-table`, `table-column, or table-column-group`.

Quirks Mode (All Versions)

The **height** property is applied to non-replaced elements that have the **display** property set to `inline`.

IE8 Mode and IE9 Mode (All Versions)

The **height** property is not applied to elements that have the **display** property set to `table-row-group`, `table-header-group`, or `table-footer-group`.

V0228:

The specification states:

```
<percentage>

Specifies a percentage height. The percentage is calculated with respect to the
height of the generated box's containing block. If the height of the containing
block is not specified explicitly (i.e., it depends on content height), and this
element is not absolutely positioned, the value computes to 'auto'. A percentage
height on the root element is relative to the initial containing block.

Note: For absolutely positioned elements whose containing block is based on a
block-level element, the percentage is calculated with respect to the height of the
padding box of that element. This is a change from CSS1, where the percentage was
always calculated with respect to the content box of the parent element."
```

Quirks Mode and IE7 Modes (All Versions)

For absolutely positioned elements with a percentage height whose containing block is based on a block-level element, the percentage is calculated with respect to the content box of the element, and not to its padding box of the element.

Quirks Mode (All Versions)

The percentage height of the root element is ignored and returned as the full size of the initial containing block (that is, all percent values return the full height of the initial containing block).

All Document Modes (All Versions)

If the height of a cell is specified, child elements with a percentage height will be at most as high as the cell's specified height even if the cell's height computes to a higher value.

2.2.34 [CSS-Level2-2009] Section 10.6.1, Inline, non-replaced elements

V0229:

The specification states:

```
The 'height' property does not apply. The height of the content area should be
based on the font, but this specification does not specify how.
```

Quirks Mode (All Versions)

The **height** property is applied to inline non-replaced elements.

V0230:

The specification states:

```
The vertical padding, border and margin of an inline, non-replaced box start at the
top and bottom of the content area, not the 'line-height'. But only the 'line-
height' is used when calculating the height of the line box.
```

Quirks Mode and IE7 Mode (All Versions)

The vertical padding, border, and margin of an inline non-replaced box start at the top and bottom of the **line-height**.

2.2.35 [CSS-Level2-2009] Section 10.6.2, Inline replaced elements, block-level replaced elements in normal flow, 'inline-block' replaced elements in normal flow and floating replaced elements

V0231:

The specification states:

```
Percentage intrinsic heights are evaluated with respect to the containing block's
height, if that height is specified explicitly, or if the replaced element is
absolutely positioned. If neither of these conditions is met, then percentage
values on such replaced elements cannot be resolved and such elements are assumed
to have no intrinsic height.
```

Quirks Mode (All Versions)

When the replaced element is absolutely positioned and the height of the containing block is not explicitly specified, the percentage height is evaluated with respect to the initial containing block (for example, the viewport).

2.2.36 [CSS-Level2-2009] Section 10.6.3, Block-level non-replaced elements in normal flow when 'overflow' computes to 'visible'

V0232:

The specification states:

```
If it has block-level children, the height is the distance between the top border-
edge of the topmost block-level child box that does not have margins collapsed
through it and the bottom border-edge of the bottommost block-level child box that
does not have margins collapsed through it. However, if the element has a non-zero
top padding and/or top border, or is the root element, then the content starts at
the top margin edge of the topmost child. (The first case expresses the fact that
the top and bottom margins of the element collapse with those of the topmost and
bottommost children, while in the second case the presence of the padding/border
prevents the top margins from collapsing.) Similarly, if the bottom margin of the
block does not collapse with the bottom margin of its last in-flow child, then the
content ends at the bottom margin edge of the bottommost child.
```

Quirks Mode and IE7 Mode (All Versions)

Margins do not collapse if a value is specified for either padding or border. The computed height includes the non-collapsed margin.

2.2.37 [CSS-Level2-2009] Section 10.6.5, Absolutely positioned, replaced elements

V0233:

The specification states:

```
This situation is similar to the previous one, except that the element has an
intrinsic height. The sequence of substitutions is now:

1. The used value of 'height' is determined as for inline replaced elements. If
'margin-top' or 'margin-bottom' is specified as 'auto' its used value is determined
by the rules below.
2. If both 'top' and 'bottom' have the value 'auto', replace 'top' with the
element's static position.
3. If 'bottom' is 'auto', replace any 'auto' on 'margin-top' or 'margin-bottom'
with '0'.
4. If at this point both 'margin-top' and 'margin-bottom' are still 'auto', solve
the equation under the extra constraint that the two margins must get equal values.
5. If at this point there is only one 'auto' left, solve the equation for that
value.
6. If at this point the values are over-constrained, ignore the value for 'bottom'
and solve for that value.
```

Quirks Mode and IE7 Mode (All Versions)

An absolutely-positioned replaced element with a percentage height that cannot be resolved is collapsed to a height of 0.

Quirks Mode (All Versions)

The following clarifications apply:

- The height of the replaced element is not restricted to 150px.
- A percentage height that cannot be resolved using these rules is instead calculated with respect to the initial containing block.

2.2.38 [CSS-Level2-2009] Section 10.7, Minimum and maximum heights: 'min-height' and 'max-height'

V0234:

The specification states:

```
'min-height'

Value:                <length> | <percentage> | inherit
Initial:              0
Applies to:           all elements but non-replaced inline elements, table columns, and
column groups
Inherited:            no
Percentages:          see prose
Media:                visual
Computed value:       the percentage as specified or the absolute length
```

Quirks Mode (All Versions)

The **min-height** property is not supported.

IE7 Mode (All Versions)

The **min-height** property is not supported for the following elements:

- **table-row-group**
- **table-header-group**
- **table-footer-group**
- **table-row, table**
- **inline-table**

V0235:

The specification states:

```
'max-height'

Value:                <length> | <percentage> | none | inherit
Initial:              none
Applies to:           all elements but non-replaced inline elements, table columns, and
column groups
Inherited:            no
Percentages:          see prose
Media:                visual
Computed value:  the percentage as specified or the absolute length or 'none'
```

Quirks Mode (All Versions)

The **max-height** property is not supported.

IE7 Mode (All Versions)

The **max-height** property is not supported for the following elements:

- **table-column**
- **table-column-group**
- **table**
- **inline-table**

IE8 Mode and IE9 Mode (All Versions)

The **max-height** property is not supported for the following elements:

- **table-row-group**
- **table-header-group**
- **table-footer-group**
- **table-row**
- **table-cell**

V0236:

The specification states:

```
None

(Only on 'max-height') No limit on the height of the box.
```

Quirks Mode (All Versions)

The **max-height** property is not supported.

V0237:

The specification states:

```
The following algorithm describes how the two properties influence the used value
of the 'height' property:

The tentative used height is calculated (without 'min-height' and 'max-height')
following the rules under "Calculating heights and margins" above.

If this tentative height is greater than 'max-height', the rules above are applied
again, but this time using the value of 'max-height' as the computed value for
'height'.

If the resulting height is smaller than 'min-height', the rules above are applied
```

```
again, but this time using the value of 'min-height' as the computed value for
'height'. These steps do not affect the real computed values of the above
properties. The change of used 'height' has no effect on margin collapsing except
as specifically required by rules for 'min-height' or 'max-height' in "Collapsing
margins" (8.3.1).
```

Quirks Mode (All Versions)

The **max-height** and **min-height** properties are not supported.

IE7 Mode (All Versions)

The **min-height** property is not supported for the following elements:

- **table-row-group**
- **table-header-group**
- **table-footer-group**
- **table-row**
- **table**
- **inline-table**

The **max-height** property is not supported for the following elements:

- **table-column-group**
- **table-column**
- **table**
- **inline-table**

IE8 Mode and IE9 Mode (All Versions)

The **max-height** property is not supported for the following elements:

- **table-row-group**
- **table-header-group**
- **table-footer-group**
- **table-row**
- **table-cell**

2.2.39 [CSS-Level2-2009] Section 10.8.1, Leading and half-leading

V0238:

The specification states:

```
Although margins, borders, and padding of non-replaced elements do not enter into
the line box calculation, they are still rendered around inline boxes. This means
that if the height specified by 'line-height' is less than the content height of
contained boxes, backgrounds and colors of padding and borders may "bleed" into
adjoining line boxes. User agents should render the boxes in document order. This
will cause the borders on subsequent lines to paint over the borders and text of
previous lines.
```

Quirks Mode and IE7 Mode (All Versions)

The following clarifications apply:

- Backgrounds, padding colors, and borders are clipped to the bottom of the content box.
- Backgrounds, padding colors, and borders are also clipped to the top of the content box if the value of the box is anything other than auto.

V0239:

The specification states:

```
<length>

The specified length is used in the calculation of the line box height. Negative
values are illegal.
```

Quirks Mode and IE7 Mode (All Versions)

The following clarifications apply:

- When the value of the line-height property is less than the content height the portion of the font that would pass below the bottom edge of the content box is clipped and does not appear outside of the box.
- When the width of the element is computed to a value other than auto the content is clipped at the top edge of the content box.

V0240:

The specification states:

```
<number>

The used value of the property is this number multiplied by the element's font
size. Negative values are illegal. The computed value is the same as the specified
value.
```

Quirks Mode and IE7 Mode (All Versions)

The following clarifications apply:

- When the value of the line-height property is less than the content height, the portion of the font that would pass below the bottom edge of the content box is clipped and does not appear outside of the box.
- When the width of the element is computed to a value other than `auto`, the content is clipped at the top edge of the content box.

V0241:

The specification states:

```
<percentage>

The computed value of the property is this percentage multiplied by the element's
computed font size. Negative values are illegal.
```

Quirks Mode and IE7 Mode (All Versions)

The following clarifications apply:

- When the value of the line-height property is less than the content height the portion of the font that would pass below the bottom edge of the content box is clipped and does not appear outside of the box.
- When the width of the element is computed to a value other than auto the content is clipped at the top edge of the content box.

V0242:

The specification states:

```
'vertical-align'

Value:                  baseline | sub | super | top | text-top | middle | bottom | text-
bottom | <percentage> | <length> | inherit
Initial:                baseline
Applies to:             inline-level and 'table-cell' elements
Inherited:              no
Percentages:            refer to the 'line-height' of the element itself
Media:                  visual
Computed value:         for <percentage> and <length> the absolute length, otherwise as
specified

This property affects the vertical positioning inside a line box of the boxes
generated by an inline-level element.
```

Quirks Mode and IE7 Mode (All Versions)

The **vertical-align** property of the **table-cell** elements is not supported.

V0243:

The specification states:

```
The following values align the element relative to the line box. Since the element
may have children aligned relative to it (which in turn may have descendants
```

```
aligned relative to them), these values use the bounds of the aligned subtree. The
aligned subtree of an inline element contains that element and the aligned subtrees
of all children inline elements whose computed 'vertical-align' value is not 'top'
or 'bottom'. The top of the aligned subtree is the highest of the tops of the boxes
in the subtree, and the bottom is analogous.

top
Align the top of the aligned subtree with the top of the line box.

bottom
Align the bottom of the aligned subtree with the bottom of the line box.
```

Quirks Mode and IE7 Mode (All Versions)

The **vertical-align** property of the **table-cell** elements is not supported.

V0244:

The specification states:

```
The baseline of an 'inline-block' is the baseline of its last line box in the
normal flow, unless it has either no in-flow line boxes or if its 'overflow'
property has a computed value other than 'visible', in which case the baseline is
the bottom margin edge.
```

Quirks Mode and IE7 Mode (All Versions)

When the **overflow** property has a computed value other than `visible` the hidden element is not used to calculate the baseline.

2.2.40 [CSS-Level2-2009] Section 11.1.1, Overflow: the 'overflow' property

C0017:

The specification states:

```
scroll
This value indicates that the content is clipped and that if the user agent uses a
scrolling mechanism that is visible on the screen (such as a scroll bar or a
panner), that mechanism should be displayed for a box whether or not any of its
content is clipped. This avoids any problem with scrollbars appearing and
disappearing in a dynamic environment. When this value is specified and the target
medium is 'print', overflowing content may be printed.
```

Quirks Mode (All Versions)

Scroll bars do not appear when the container for a box with the value of the **overflow** property set to `scroll` does not have a height or a width specified.

2.2.41 [CSS-Level2-2009] Section 12.3.1, Specifying quotes with the 'quotes' property

V0245:

The specification states:

```
'quotes'

Value:                  <string> <string>]+ | none | inherit
Initial:                depends on user agent
Applies to:             all elements
Inherited:              yes
Percentages:            N/A
Media:                  visual
Computed value:         as specified
```

Quirks Mode and IE7 Mode (All Versions)

The **quotes** property is not supported.

V0246:

The specification states:

```
[<string>  <string>]+

Values for the 'open-quote' and 'close-quote' values of the 'content' property are
taken from this list of pairs of quotation marks (opening and closing). The first
(leftmost) pair represents the outermost level of quotation, the second pair the
first level of embedding, etc. The user agent must apply the appropriate pair of
quotation marks according to the level of embedding.
```

Quirks Mode and IE7 Mode (All Versions)

The **quotes** property is not supported; therefore the `<string>` values are not supported.

2.2.42 [CSS-Level2-2009] Section 12.3.2, Inserting quotes with the 'content' property

V0247:

The specification states:

```
Some typographic styles require open quotation marks to be repeated before every
paragraph of a quote spanning several paragraphs, but only the last paragraph ends
with a closing quotation mark. In CSS, this can be achieved by inserting "phantom"
closing quotes. The keyword 'no-close-quote' decrements the quoting level, but does
not insert a quotation mark.
```

Quirks Mode and IE7 Mode (All Versions)

The following values of the **content** property are not supported:

```
open-quote
close-quote
no-close-quote
```

V0248:

The specification states:

```
For symmetry, there is also a 'no-open-quote' keyword, which inserts nothing, but
increments the quotation depth by one.
```

Quirks Mode and IE7 Mode (All Versions)

The following values of the **content** property are not supported:

```
open-quote
close-quote
no-close-quote
```

2.2.43 [CSS-Level2-2009] Section 12.4, Automatic counters and numbering

V0249:

The specification states:

```
'counter-increment'

Value:                <identifier> <integer>? ]+ | none | inherit
Initial:              none
Applies to:           all elements
Inherited:            no
Percentages:          N/A
Media:                all
Computed value:       as specified
```

Quirks Mode and IE7 Mode (All Versions)

The **counter-increment** property is not supported.

V0250:

The specification states:

```
The 'counter-increment' property accepts one or more names of counters
(identifiers), each one optionally followed by an integer. The integer indicates by
how much the counter is incremented for every occurrence of the element. The
default increment is 1. Zero and negative integers are allowed.
```

Quirks Mode and IE7 Mode (All Versions)

The **counter-increment** property is not supported.

V0251:

The specification states:

```
If the same counter is specified more than once in the value of the 'counter-reset'
and 'counter-increment' properties, each reset/increment of the counter is
processed in the order specified.
```

Quirks Mode and IE7 Mode (All Versions)

The **counter-increment** property is not supported.

2.2.44 [CSS-Level2-2009] Section 12.4.1, Nested counters and scope

V0252:

The specification states:

```
If 'counter-increment' or 'content' on an element or pseudo-element refers to a
counter that is not in the scope of any 'counter-reset', implementations should
behave as though a 'counter-reset' had reset the counter to 0 on that element or
pseudo-element.
```

Quirks Mode and IE7 Mode (All Versions)

The **counter-increment** property is not supported.

2.2.45 [CSS-Level2-2009] Section 13.2.1, Page margins

C0019:

The specification states:

```
Due to negative margin values (either on the page box or on elements) or absolute
positioning content may end up outside the page box, but this content may be "cut"
— by the user agent, the printer, or ultimately, the paper cutter.
```

Quirks Mode and IE7 Mode (All Versions)

Content outside the page box is not discarded when negative margins are used.

2.2.46 [CSS-Level2-2009] Section 13.2.3, Content outside the page box

C0020:

The specification states:

```
User agents may handle boxes positioned outside the page box in several ways,
including discarding them or creating page boxes for them at the end of the
document.
```

Quirks Mode and IE7 Mode (All Versions)

Boxes that are positioned outside the page box are printed inline on the page.

IE8 Mode and IE9 Mode (All Versions)

Boxes that are positioned outside the page box are discarded.

2.2.47 [CSS-Level2-2009] Section 13.3.1, Page break properties: 'page-break-before', 'page-break-after', 'page-break-inside'

C0021:

The specification states:

```
Left

Force one or two page breaks before (after) the generated box so that the next page
is formatted as a left page.
```

All Document Modes (All Versions)

The `left` value of the **page-break-before** and **page-break-after** properties is interpreted as `always` as per the specification statement: "Whether the first page of a document is **:left** or **:right** depends on the major writing direction of the document. A conforming user agent may interpret the values `left` and `right` as `always`."

C0022:

The specification states:

```
Right

Force one or two page breaks before (after) the generated box so that the next page
is formatted as a right page.
```

All Document Modes (All Versions)

The `right` value of the **page-break-before** and **page-break-after** properties is interpreted as `always`, as per the specification statement: "Whether the first page of a document is **:left** or **:right** depends on the major writing direction of the document. A conforming user agent may interpret the values `left` and `right` as `always`."

2.2.48 [CSS-Level2-2009] Section 15.3, Font family: the 'font-family' property

V0253:

The specification states:

```
If quoting is omitted, any white space characters before and after the font name
are ignored and any sequence of white space characters inside the font name is
converted to a single space. Font family names that happen to be the same as a
keyword value ('inherit', 'serif', 'sans-serif', 'monospace', 'fantasy', and
'cursive') must be quoted to prevent confusion with the keywords with the same
names. The keywords 'initial' and 'default' are reserved for future use and must
also be quoted when used as font names. UAs must not consider these keywords as
matching the '<family-name>' type.
```

Quirks Mode and IE7 Mode (All Versions)

White space characters before and after the font name are not ignored. In addition, any extra white spaces are not consolidated inside the font name. Therefore, the rule fails to parse and the font is not properly loaded.

2.2.49 [CSS-Level2-2009] Section 15.5, Small-caps: the 'font-variant' property

V0254:

The specification states:

```
'font-variant'

Value:                normal | small-caps | inherit
Initial:              normal
Applies to:           all elements
Inherited:            yes
Percentages:          N/A
Media:                visual
Computed value:       as specified

Another type of variation within a font family is the small-caps. In a small-caps
font the lower case letters look similar to the uppercase ones, but in a smaller
size and with slightly different proportions. The 'font-variant' property selects
that font.
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **font-variant** property is not supported.

2.2.50 [CSS-Level2-2009] Section 15.6, Font boldness: the 'font-weight' property

V0255:

The specification states:

```
'font-weight'

Value:                normal | bold | bolder | lighter | 100 | 200 | 300 | 400 | 500 | 600 |
700 | 800 | 900 | inherit
Initial:              normal
Applies to:           all elements
Inherited:            yes
Percentages:          N/A
Media:                visual
Computed value:       see text
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **font-weight** property is not supported.

2.2.51 [CSS-Level2-2009] Section 15.8, Shorthand font property: the 'font' property

V0256:

The specification states:

```
'font'

Value:                  [ [ <'font-style'> || <'font-variant'> || <'font-weight'> ]? <'font-
size'> [ / <'line-height'> ]? <'font-family'> ] | caption | icon | menu | message-box |
small-caption | status-bar | inherit
Initial:                see individual properties
Applies to:             all elements
Inherited:              yes
Percentages:            see individual properties
Media:\                 visual
Computed value:         see individual properties
```

Quirks Mode and IE7 Mode (All Versions)

The `inherit` value of the **font** property is not supported.

2.2.52 [CSS-Level2-2009] Section 16.2, Alignment: the 'text-align' property

C0023:

The specification states:

```
Conforming user agents may interpret the value 'justify' as 'left' or 'right',
depending on whether the element's default writing direction is left-to-right or
right-to-left, respectively.
```

All Document Modes (All Versions)

The `justify` value is interpreted as justified so that text is spaced out on all lines except the last line.

2.2.53 [CSS-Level2-2009] Section 16.6, Whitespace: the 'white-space' property

V0257:

The specification states:

```
pre-wrap

This value prevents user agents from collapsing sequences of white space. Lines are
broken at newlines in the source, at occurrences of "\A" in generated content, and
as necessary to fill line boxes.
```

Quirks Mode and IE7 Mode (All Versions)

The `pre-wrap` value of the **white-space** property is not supported.

V0258:

The specification states:

```
pre-line
```

```
This value directs user agents to collapse sequences of white space. Lines are
broken at newlines in the source, at occurrences of "\A" in generated content, and
as necessary to fill line boxes.
```

Quirks Mode and IE7 Mode (All Versions)

The `pre-line` value of the **white-space** property is not supported and is treated as normal.

2.2.54 [CSS-Level2-2009] Section 16.6.1, The 'white-space' processing model

V0259:

The specification states:

```
If 'white-space' is set to 'pre' or 'pre-wrap', any sequence of spaces (U+0020)
unbroken by an element boundary is treated as a sequence of non-breaking spaces.
However, for 'pre-wrap', a line breaking opportunity exists at the end of the
sequence.
```

Quirks Mode and IE7 Mode (All Versions)

The `pre-wrap` value of the **white-space** property is not supported, and is treated as normal so that sequences of spaces are collapsed.

V0260:

The specification states:

```
As each line is laid out,

1. If a space (U+0020) at the beginning of a line has 'white-space' set to
'normal', 'nowrap', or 'pre-line', it is removed.
```

All Document Modes (All Versions)

A space at the beginning of the line is removed if the **white-space** property is set to `pre-wrap`.

Quirks Mode (All Versions)

A space at the beginning of the line is removed if the **white-space** property is set to `pre`.

V0261:

The specification states:

```
2. All tabs (U+0009) are rendered as a horizontal shift that lines up the start
edge of the next glyph with the next tab stop. Tab stops occur at points that are
multiples of 8 times the width of a space (U+0020) rendered in the block's font
from the block's starting content edge.
```

Quirks Mode (All Versions)

Tabs are not rendered.

C0024:

The specification states:

```
4. If spaces (U+0020) or tabs (U+0009) at the end of a line have 'white-space' set
to 'pre-wrap', UAs may visually collapse them.
```

Quirks Mode and IE7 Mode (All Versions)

When the **white-space** property is set to `pre-wrap`, spaces and tabs at the end of a line are collapsed.

IE8 Mode and IE9 Mode (All Versions)

When the **white-space** property is set to `pre-wrap`, spaces and tabs at the end of a line are NOT collapsed.

2.2.55 [CSS-Level2-2009] Section 17.2, The CSS table model

V0262:

The specification states:

```
table (In HTML: TABLE)

Specifies that an element defines a block-level table: it is a rectangular block
that participates in a block formatting context.
```

Quirks Mode and IE7 Mode (All Versions)

The `table` value of the **display** property is not supported.

All Document Modes (All Versions)

Any content of an element that has its **display** property set to `none` is not properly collected into the correct cells and extra anonymous tables are created.

V0263:

The specification states:

```
inline-table (In HTML: TABLE)

Specifies that an element defines an inline-level table: it is a rectangular block
that participates in an inline formatting context).
```

Quirks Mode and IE7 Mode (All Versions)

The `inline-table` value of the **display** property is not supported.

V0264:

The specification states:

```
table-row (In HTML: TR)

Specifies that an element is a row of cells.
```

Quirks Mode and IE7 Mode (All Versions)

The `table-row` value of the **display** property is not supported.

V0265:

The specification states:

```
table-row-group (In HTML: TBODY)

Specifies that an element groups one or more rows.
```

Quirks Mode and IE7 Mode (All Versions)

The `table-row-group` value of the **display** property is not supported.

V0266:

The specification states:

```
table-header-group (In HTML: THEAD)

Like 'table-row-group', but for visual formatting, the row group is always
displayed before all other rows and row groups and after any top captions. Print
user agents may repeat header rows on each page spanned by a table. If a table
contains multiple elements with 'display: table-header-group', only the first is
rendered as a header; the others are treated as if they had 'display: table-row-
group'.
```

Quirks Mode and IE7 Mode (All Versions)

The following clarifications apply:

- Table-header-groups are not positioned before any table captions before other table-rows and row-groups.
- Header rows are not repeated on each page spanned by a table in page media.

C0025:

The specification states:

```
table-footer-group (In HTML: TFOOT)

Print user agents may repeat footer rows on each page spanned by a table.
```

IE8 Mode and IE9 Mode (All Versions)

The footer is repeated on each page spanned by the table.

V0267:

The specification states:

```
table-column (In HTML: COL)

Specifies that an element describes a column of cells.
```

Quirks Mode and IE7 Mode (All Versions)

The `table-column` value of the **display** property is not supported.

V0268:

The specification states:

```
table-column-group (In HTML: COLGROUP)

Specifies that an element groups one or more columns.
```

Quirks Mode and IE7 Mode (All Versions)

The `table-column-group` value of the **display** property is not supported.

V0269:

The specification states:

```
table-cell (In HTML: TD, TH)

Specifies that an element represents a table cell.
```

Quirks Mode and IE7 Mode (All Versions)

The `table-cell` value of the **display** property is not supported.

V0270:

The specification states:

```
Replaced elements with these 'display' values are treated as their given display
types during layout. For example, an image that is set to 'display: table-cell'
will fill the available cell space, and its dimensions might contribute towards the
table sizing algorithms, as with an ordinary cell.
```

Quirks Mode and IE7 Mode (All Versions)

The table-related values of the **display** property are not supported.

V0271:

The specification states:

```
Elements with 'display' set to 'table-column' or 'table-column-group' are not
```

```
rendered (exactly as if they had 'display: none'), but they are useful, because
they may have attributes which induce a certain style for the columns they
represent.
```

Quirks Mode and IE7 Mode (All Versions)

The `table-column` and `table-column-group` values of the **display** property are not supported.

C0026:

The specification states:

```
User agents may ignore these 'display' property values for HTML table elements,
since HTML tables may be rendered using other algorithms intended for backwards
compatible rendering. However, this is not meant to discourage the use of 'display:
table' on other, non-table elements in HTML.
```

All Document Modes (All Versions)

The **display** property values of HTML table elements are ignored.

2.2.56 [CSS-Level2-2009] Section 17.4, Tables in the visual formatting model

V0272:

The specification states:

```
In terms of the visual formatting model, a table can behave like a block-level (for 'display:
table') or inline-level (for 'display: inline-table') element. In both cases, the table box
generates an anonymous box that contains the table box itself and any caption boxes (in
document order). The caption boxes are block-level boxes that retain their own content,
padding, margin, and border areas, and are rendered as normal blocks inside the anonymous
box. Whether the caption boxes are placed before or after the table box is decided by the
'caption-side' property, as described below.
```

Quirks Mode and IE7 Mode (All Versions)

The table-element values of the **display** property are not supported; therefore `display:table` and `display:inline-table` are not supported.

All Document Modes (All Versions)

The width and height of table boxes of table captions have no effect on the width and height of table boxes.

2.2.57 [CSS-Level2-2009] Section 17.4.1, Caption position and alignment

V0273:

The specification states:

```
'caption-side'

Value:                  top | bottom | inherit
Initial:                top
```

```
Applies to:            'table-caption' elements
Inherited:             yes
Percentages:           N/A
Media:                 visual
Computed value:        as specified

This property specifies the position of the caption box with respect to the table
box. Values have the following meanings:

top
Positions the caption box above the table box.

bottom
Positions the caption box below the table box.
```

Quirks Mode and IE7 Mode (All Versions)

The **caption-side** property is not supported.

2.2.58 [CSS-Level2-2009] Section 17.5, Visual layout of table contents

C0027:

The specification states:

```
Cells may span several rows or columns… If this position would cause a column-spanning cell
to overlap a row-spanning cell from a prior row, CSS does not define the results:
implementations may either overlap the cells (as is done in many HTML
implementations) or may shift the later cell to the right to avoid such overlap.
```

All Document Modes (All Versions)

If a column-spanning cell overlaps with a row-spanning cell, the cells are overlapped.

V0274:

The specification states:

```
Note. Positioning and floating of table cells can cause them not to be table cells
anymore, according to the rules in section 9.7. When floating is used, the rules on
anonymous table objects may cause an anonymous cell object to be created as well.
```

Quirks Mode and IE7 Mode (All Versions)

The floating cell is removed from the table, but is not replaced with an empty cell.

2.2.59 [CSS-Level2-2009] Section 17.5.1, Table layers and transparency

V0275:

The specification states:

```
A "missing cell" is a cell in the row/column grid that is not occupied by an
element or pseudo-element. Missing cells are rendered as if an anonymous table-cell
```

```
box occupied their position in the grid.
```

Quirks Mode and IE7 Mode (All Versions)

Missing cells that have content are treated as anonymous table-rows, not cells.

2.2.60 [CSS-Level2-2009] Section 17.5.2.1, Fixed table layout

V0276:

The specification states:

```
The width of the table is then the greater of the value of the 'width' property for
the table element and the sum of the column widths (plus cell spacing or borders).
If the table is wider than the columns, the extra space should be distributed over
the columns.
```

Quirks Mode and IE7 Mode (All Versions)

The **border-spacing** property is not supported, so if a border-spacing value is specified it will not be taken into consideration when the table width is calculated. This includes when the border spacing is set to 0.

C0028:

The specification states:

```
If a subsequent row has more columns than the greater of the number determined by
the table-column elements and the number determined by the first row, then
additional columns may not be rendered. CSS 2.1 does not define the width of the
columns and the table if they are rendered. When using 'table-layout: fixed',
authors should not omit columns from the first row.
```

All Document Modes (All Versions)

In a fixed-layout table, extra columns are rendered.

2.2.61 [CSS-Level2-2009] Section 17.5.3, Table height algorithms

V0277:

The specification states:

```
The height of a table is given by the 'height' property for the 'table' or 'inline-
table' element. A value of 'auto' means that the height is the sum of the row
heights plus any cell spacing or borders. Any other value is treated as a minimum
height. CSS 2.1 does not define how extra space is distributed when the 'height'
property causes the table to be taller than it otherwise would be. Note. Future
updates of CSS may specify this further.
```

Quirks Mode and IE7 Mode (All Versions)

The **border-spacing** property is not supported, so if the table includes border spacing, the height is not incorporated into the table height. Borders are spaced 1px apart.

2.2.62 [CSS-Level2-2009] Section 17.5.5, Dynamic row and column effects

V0278:

The specification states:

```
The 'visibility' property takes the value 'collapse' for row, row group, column,
and column group elements. This value causes the entire row or column to be removed
from the display, and the space normally taken up by the row or column to be made
available for other content. Contents of spanned rows and columns that intersect
the collapsed column or row are clipped. The suppression of the row or column,
however, does not otherwise affect the layout of the table. This allows dynamic
effects to remove table rows or columns without forcing a re-layout of the table in
 order to account for the potential change in column constraints.
```

Quirks Mode and IE7 Mode (All Versions)

The **visibility** property is ignored.

2.2.63 [CSS-Level2-2009] Section 17.6, Borders

V0279:

The specification states:

```
'border-collapse'

Value:                 collapse | separate | inherit
Initial:               separate
Applies to:            'table' and 'inline-table' elements
Inherited:             yes
Percentages:           N/A
Media:                 visual
Computed value:        as specified

This property selects a table's border model. The value 'separate' selects the
separated borders border model. The value 'collapse' selects the collapsing borders
model. The models are described below.
```

Quirks Mode and IE7 Mode (All Versions)

The **table** and **inline-table** elements are not supported.

2.2.64 [CSS-Level2-2009] Section 17.6.1, The separated borders model

V0280:

The specification states:

```
The lengths specify the distance that separates adjoining cell borders. If one
length is specified, it gives both the horizontal and vertical spacing. If two are
specified, the first gives the horizontal spacing and the second the vertical
```

```
spacing. Lengths may not be negative.
```

Quirks Mode and IE7 Mode (All Versions)

The **border-spacing** property is not supported.

V0281:

The specification states:

```
In this model, each cell has an individual border. The 'border-spacing' property
specifies the distance between the borders of adjoining cells. In this space, the
row, column, row group, and column group backgrounds are invisible, allowing the
table background to show through. Rows, columns, row groups, and column groups
cannot have borders (i.e., user agents must ignore the border properties for those
elements).
```

Quirks Mode and IE7 Mode (All Versions)

The **border-spacing** property is not supported.

2.2.65 [CSS-Level2-2009] Section 17.6.1.1, Borders and Backgrounds around empty cells: the 'empty-cells' property

V0282:

The specification states:

```
'empty-cells'

Value:                  show | hide | inherit
Initial:                show
Applies to:             'table-cell' elements
Inherited:              yes
Percentages:            N/A
Media:                  visual
Computed value:         as specified
```

Quirks Mode (All Versions)

The **empty-cells** property of **table-cell** elements is not supported.

IE7 Mode (All Versions)

The **empty-cells** property applies to **inline** elements.

V0283:

The specification states:

```
A value of 'hide' means that no borders or backgrounds are drawn around/behind
empty cells (see point 6 in 17.5.1). Furthermore, if all the cells in a row have a
value of 'hide' and have no visible content, then the row has zero height and there
is vertical border-spacing on only one side of the row.
```

Quirks Mode and IE7 Mode (All Versions)

The **empty-cells** property is not supported, so empty cells will always render as if they have a value of `hide`. If all cells in a row are empty, that row will not appear.

IE8 Mode and IE9 Mode (All Versions)

If all cells in a row are empty and the **empty-cells** property is set to `hide`, space will still be reserved for that row.

2.2.66 [CSS-Level2-2009] Section 17.6.2, The collapsing border model

V0284:

The specification states:

```
UAs must compute an initial left and right border width for the table by examining
the first and last cells in the first row of the table. The left border width of
the table is half of the first cell's collapsed left border, and the right border
width of the table is half of the last cell's collapsed right border. If subsequent
rows have larger collapsed left and right borders, then any excess spills into the
margin area of the table.
```

Quirks Mode and IE7 Mode (All Versions)

The following clarifications apply:

- If a table has a border set, that border overrides the cell border on the table edges.
- If there is a cell border but no table border, the border width is not divided in half when calculating the border width in the collapsed model.

V0285:

The specification states:

```
The top border width of the table is computed by examining all cells who collapse
their top borders with the top border of the table. The top border width of the
table is equal to half of the maximum collapsed top border. The bottom border width
is computed by examining all cells whose bottom borders collapse with the bottom of
the table. The bottom border width is equal to half of the maximum collapsed bottom
border.
```

Quirks Mode and IE7 Mode (All Versions)

The top and bottom widths of the table border are not computed via the specified methods. Instead, the border widths are 0.

V0286:

The specification states:

```
Any borders that spill into the margin are taken into account when determining if
the table overflows some ancestor (see 'overflow').
```

Quirks Mode and IE7 Mode (All Versions)

Borders that spill into the margin overflow their ancestors.

2.2.67 [CSS-Level2-2009] Section 17.6.2.1, Border conflict resolution

V0287:

The specification states:

```
In the collapsing border model, borders at every edge of every cell may be
specified by border properties on a variety of elements that meet at that edge
(cells, rows, row groups, columns, column groups, and the table itself), and these
borders may vary in width, style, and color.
```

Quirks Mode and IE7 Mode (All Versions)

The **border** property is not supported for the following elements:

```
table-row-group (tbody)
table-row (tr)
table-column (col)
table-column-group (colgroup)
```

V0288:

The specification states:

```
1.  Borders with the 'border-style' of 'hidden' take precedence over all other
conflicting borders. Any border with this value suppresses all borders at this
location.
```

Quirks Mode and IE7 Mode (All Versions)

The `hidden` value does not take precedence over any other border style. Borders are displayed at this location.

V0289:

The specification states:

```
3. If none of the styles are 'hidden' and at least one of them is not 'none', then
narrow borders are discarded in favor of wider ones. If several have the same
'border-width' then styles are preferred in this order: 'double', 'solid',
'dashed', 'dotted', 'ridge', 'outset', 'groove', and the lowest: 'inset'.
```

Quirks Mode and IE7 Mode (All Versions)

Border conflicts among borders of the same thickness are not resolved. The border for each cell is drawn beginning from left to right, from the top row to the bottom row. After the first cell border in the row is drawn, the next cell border is drawn over the previous border. In some cases, this behavior results in a combined border. For example, if the cell on the left has a solid red border and the adjacent cell on the right has a double black border, the border the two cells share appears as a

double black border with red in the space between the two lines. However, if the cell on the left has the double border and the cell on the right has the solid red border, the border the two cells share appears as a solid red border. Note that in rtl mode, the cell borders are drawn from right to left, top to bottom so that the border that appears on top is reversed.

V0290:

The specification states:

```
4. If border styles differ only in color, then a style set on a cell wins over one
on a row, which wins over a row group, column, column group and, lastly, table.
When two elements of the same type conflict, then the one further to the left (if
the table's 'direction' is 'ltr'; right, if it is 'rtl') and further to the top
wins.
```

Quirks Mode and IE7 Mode (All Versions)

Borders that are set on the table will win over those that are set on the cells.

2.2.68 [CSS-Level2-2009] Section 17.6.3, Border styles

V0291:

The specification states:

```
Some of the values of the 'border-style' have different meanings in tables than for
other elements. In the list below they are marked with an asterisk.

none
No border.

*hidden
Same as 'none', but in the collapsing border model, also inhibits any other border
(see the section on border conflicts).

…

*inset
In the separated borders model, the border makes the entire box look as though it
were embedded in the canvas. In the collapsing border model, same as 'ridge'.

*outset
In the separated borders model, the border makes the entire box look as though it
were coming out of the canvas. In the collapsing border model, same as 'groove'.
```

Quirks Mode and IE7 Mode (All Versions)

The following clarifications apply:

- In the collapsing border model, `hidden` behaves the same as `none`.
- In the collapsing border model, `inset` and `outset` behave the same as in the separated borders model.

2.2.69 [CSS-Level2-2009] Section 18.4, Dynamic outlines: the 'outline' property

V0292:

The specification states:

```
The outline created with the outline properties is drawn "over" a box, i.e., the
outline is always on top, and does not influence the position or size of the box,
or of any other boxes. Therefore, displaying or suppressing outlines does not cause
reflow or overflow.
```

Quirks Mode and IE7 Mode (All Versions)

The **outline** property is not supported.

All Document Modes (All Versions)

Outlines are drawn underneath positioned descendants.

V0293:

The specification states:

```
Outlines may be non-rectangular. For example, if the element is broken across
several lines, the outline is the minimum outline that encloses all the element's
boxes. In contrast to borders, the outline is not open at the line box's end or
start, but is always fully connected if possible.
```

Quirks Mode and IE7 Mode (All Versions)

The **outline** property is not supported.

V0294:

The specification states:

```
The 'outline-color' accepts all colors, as well as the keyword 'invert'. 'Invert'
is expected to perform a color inversion on the pixels on the screen. This is a
common trick to ensure the focus border is visible, regardless of color background.
Conformant UAs may ignore the 'invert' value on platforms that do not support color
inversion of the pixels on the screen. If the UA does not support the 'invert'
value then the initial value of the 'outline-color' property is the value of the
'color' property, similar to the initial value of the 'border-top-color' property.
```

Quirks Mode and IE7 Mode (All Versions)

The **outline-color** property is not supported.

V0295:

The specification states:

```
This specification does not define how multiple overlapping outlines are drawn, or
how outlines are drawn for boxes that are partially obscured behind other elements.
Note. Since the outline does not affect formatting (i.e., no space is left for it
```

```
in the box model), it may well overlap other elements on the page.
```

Quirks Mode and IE7 Mode (All Versions)

The **outline** property is not supported.

2.2.70 [CSS-Level2-2009] Section 18.4.1, Outlines and the focus

V0296:

The specification states:

```
User agents supporting the interactive media group must keep track of where the
focus lies and must also represent the focus. This may be done by using dynamic
outlines in conjunction with the :focus pseudo-class.
```

Quirks Mode and IE7 Mode (All Versions)

The **outline** property is not supported.

2.2.71 [CSS-Level2-2009] Section E.2, Painting order

C0061:

The specification states:

```
4. For all its in-flow, non-positioned, block-level descendants in tree order: If the element
is a block, list-item, or other block equivalent:
1. background color of element.
2. background image of element.
3. border of element.
Otherwise, the element is a table:
1. table backgrounds (color then image).
2. column group backgrounds (color then image).
3. column backgrounds (color then image).
4. row group backgrounds (color then image).
5. row backgrounds (color then image).
6. cell backgrounds (color then image).
7. all table borders (in tree order for separated borders).
```

All Document Modes (All Versions)

The border of a table cell is rendered on top of the content of that cell.

C0062:

The specification states:

```
1. Otherwise: first for the element, then for all its in-flow, non-positioned, block-level
descendants in tree order:
1. If the element is a block-level replaced element, then: the replaced content, atomically.
2. Otherwise, for each line box of that element:
1. For each box that is a child of that element, in that line box, in tree order:
1. background color of element.
2. background image of element.
```

```
3. border of element.
4. For inline elements:
1. For all the element's in-flow, non-positioned, inline-level children that are in this line
box, and all runs of text inside the element that is on this line box, in tree order:
1. If this is a run of text, then:
1. any underlining affecting the text of the element, in tree order of the elements applying
the underlining (such that the deepest element's underlining, if any, is painted topmost and
the root element's underlining, if any, is drawn bottommost).
2. any overlining affecting the text of the element, in tree order of the elements applying
the overlining (such that the deepest element's overlining, if any, is painted topmost and
the root element's overlining, if any, is drawn bottommost).
3. the text.
4. any line-through affecting the text of the element, in tree order of the elements applying
the line-through (such that the deepest element's line-through, if any, is painted topmost
and the root element's line-through, if any, is drawn bottommost).
2. Otherwise, jump to 7.2.1 for that element.
For inline-block and inline-table elements:
1. For each one of these, treat the element as if it created a new stacking context, but any
positioned descendants and descendants which actually create a new stacking context should be
considered part of the parent stacking context, not this new one.
1. For inline-level replaced elements:
the replaced content, atomically.
Some of the boxes may have been generated by line splitting or the Unicode bidirectional
algorithm.
2. Optionally, the outline of the element (see 10 below).
3. Optionally, if the element is block-level, the outline of the element (see 10 below).
```

All Document Modes (All Versions)

The border of a table cell is rendered on top of the content of that cell.

2.2.72 [CSS-Level2-2009] Section G.1, Grammar

C0029:

The [CSS-Level2-2009] specification states:

```
expr: term [ operator? term ]*;

term: unary_operator?[ NUMBER S* | PERCENTAGE S* | LENGTH S* | EMS S* | EXS S* |
ANGLE S* |TIME S* | FREQ S* ]| STRING S* | IDENT S* | URI S* | hexcolor | function;
```

The [CSS-Level1-2008] specification, *Appendix B: CSS1 grammar* states:

```
expr
 : term [ operator term ]*
 ;
term
 : unary_operator?
   [ NUMBER | STRING | PERCENTAGE | LENGTH | EMS | EXS
   | IDENT | hexcolor | URL | RGB ]
 ;
```

Quirks Mode (All Versions)

A space is not required between a number and the next term.

Note In CSS2, a number immediately followed by an identifier is parsed as a DIMENSION token. However, CSS1 parses it as a number and an identifier. This means that in CSS1, the declaration `font: 10pt/1.2serif` is correct, as is `font: 10pt/12pt serif`; in CSS2, a space is required before 'serif'.

IE7 Mode, IE8 Mode, and IE9 Mode (All Versions)

A space is required between a number and an identifier.

2.3 Error Handling

There are no additional considerations for error handling.

2.4 Security

There are no additional security considerations.

3 Appendix A: Test Suite Failures

This section contains a set of test cases from W3C CSS 2.1 Conformance Test Suites that Windows® Internet Explorer®, in its default settings, does not pass. This appendix contains the following subsections:

- Test cases from [W3C-CSS2.1-TestSuite-20101210] published December 10, 2010 that apply to Windows® Internet Explorer® 9. These results are preliminary and describe the expected behavior for the commercial release of this technology, which may differ from the behavior of the pre-release product. See section 3.1.
- Test cases from [W3C-CSS2.1-StyleIndex] published October 1, 2009 that apply to Windows® Internet Explorer® 8. See section 3.2.

Unless otherwise specified, any test case failure from executing this set of test cases does not imply lack of conformance to the CSS specification.

3.1 Internet Explorer 9

This section contains W3C CSS 2.1 Conformance Test Suite failures for Windows® Internet Explorer® 9.

3.1.1 CSS 2.1 Test: abspos-non-replaced-width-margin-000.htm

Test Case

http://test.csswg.org/suites/css2.1/20101210/html4/abspos-non-replaced-width-margin-000.htm

The test case states:

```
<style type="text/css">

div { height: 1px; direction: ltr; }

/*
 * Every case here has three divs nested inside of each other.  The
 * innermost div (absolutely positioned) is the testcase (and has
 * color).  The middle div's content edge establishes the containing
 * block it would have if it were statically positioned.  The outermost
 * div is actually its containing block.
 *
 * the abs pos containing block runs from 50px to 700px from the left edge
 * the static pos containing block runs from 150px to 650px from the left edge
 */

/* totals for html and body: 21px on the left,  34px on the right */
html, body { border: transparent medium solid; }
html { margin: 0 3px 0 2px; padding: 0 4px 0 3px; border-width: 0 3px 0 8px; }
body { margin: 0 6px 0 3px; padding: 0 7px 0 1px; border-width: 0 11px 0 4px; }

body > div {
  position: relative;

  top: 0;
  left: 4px;

  margin-left: 16px;
```

```
    border-left: 9px solid transparent;
    /* sum of above items (29px), plus 21px above, is 50px */
    padding-left: 40px;

    width: 595px;

    padding-right: 15px;
    /* sum of above items (650px), plus 50px above, is 700px */

    border-right: 27px solid transparent;
    margin-right: 13px;
  }

  body > div > div {
    /* padding-left above: 40px */
    margin-left: 7px;
    border-left: 29px solid transparent;
    padding-left: 24px;
    /* sum of above items (100px), plus 50px above, is 150px */

    /* padding-right above: 15px */
    padding-right: 14px;
    border-right: 3px solid transparent;
    margin-right: 18px;
    /* sum of above items (50px), subtracted from 700px, is 650px */
  }

  body > div > div > div {
    background: navy;
    position: absolute;
    top: 0;
    bottom: 0;

    /* specify everything; we'll put the autos as overrides below */
    left: 3px;
    margin-left: 17px;
    border-left: 6px solid transparent;
    padding-left: 1px;
    padding-right: 9px;
    border-right: 8px solid transparent;
    margin-right: 19px;
    right: 8px;
  }

  /* and give it 72px of intrinsic width for the case where it has width:auto */
  body > div > div > div > div {
    width: 72px;
  }

  /* now we want to test all 128 combinations of presence of the following */

  body > div.adir { direction: rtl; }
  body > div.sdir > div { direction: rtl; }
  body > div.edir > div > div { direction: rtl; }
  body > div.ol > div > div { left: auto; }
  body > div.or > div > div { right: auto; }
  body > div.ml > div > div { margin-left: auto; }
  body > div.mr > div > div { margin-right: auto; }
```

```
/* combined with each of these three */
body > div.narrowwidth > div > div { width: 153px; }
body > div.autowidth > div > div { width: auto; }
body > div.widewidth > div > div { width: 660px; }

</style>
</head>
<body>

<div class="narrowwidth"><div><div><div></div></div></div></div>
<div class="narrowwidth adir"><div><div><div></div></div></div></div>
<div class="narrowwidth sdir"><div><div><div></div></div></div></div>
<div class="narrowwidth sdir adir"><div><div><div></div></div></div></div>
<div class="narrowwidth edir"><div><div><div></div></div></div></div>
<div class="narrowwidth edir adir"><div><div><div></div></div></div></div>
<div class="narrowwidth edir sdir"><div><div><div></div></div></div></div>
<div class="narrowwidth edir sdir adir"><div><div><div></div></div></div></div>
<div class="narrowwidth ol"><div><div><div></div></div></div></div>
<div class="narrowwidth ol adir"><div><div><div></div></div></div></div>
<div class="narrowwidth ol sdir"><div><div><div></div></div></div></div>
<div class="narrowwidth ol sdir adir"><div><div><div></div></div></div></div>
<div class="narrowwidth ol edir"><div><div><div></div></div></div></div>
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<div class="narrowwidth ol edir sdir"><div><div><div></div></div></div></div>
<div class="narrowwidth ol edir sdir adir"><div><div><div></div></div></div></div>
<div class="narrowwidth or"><div><div><div></div></div></div></div>
<div class="narrowwidth or adir"><div><div><div></div></div></div></div>
<div class="narrowwidth or sdir"><div><div><div></div></div></div></div>
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<div class="narrowwidth or edir sdir adir"><div><div><div></div></div></div></div>
<div class="narrowwidth or ol"><div><div><div></div></div></div></div>
<div class="narrowwidth or ol adir"><div><div><div></div></div></div></div>
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<div class="narrowwidth ml"><div><div><div></div></div></div></div>
<div class="narrowwidth ml adir"><div><div><div></div></div></div></div>
<div class="narrowwidth ml sdir"><div><div><div></div></div></div></div>
<div class="narrowwidth ml sdir adir"><div><div><div></div></div></div></div>
<div class="narrowwidth ml edir"><div><div><div></div></div></div></div>
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<div class="narrowwidth ml edir sdir adir"><div><div><div></div></div></div></div>
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<div class="narrowwidth ml ol edir"><div><div><div></div></div></div></div>
<div class="narrowwidth ml ol edir adir"><div><div><div></div></div></div></div>
<div class="narrowwidth ml ol edir sdir"><div><div><div></div></div></div></div>
<div class="narrowwidth ml ol edir sdir adir"><div><div><div></div></div></div></div>
<div class="narrowwidth ml or"><div><div><div></div></div></div></div>
<div class="narrowwidth ml or adir"><div><div><div></div></div></div></div>
```

```
<div class="narrowwidth ml or sdir"><div><div><div></div></div></div></div>
<div class="narrowwidth ml or sdir adir"><div><div><div></div></div></div></div>
<div class="narrowwidth ml or edir"><div><div><div></div></div></div></div>
<div class="narrowwidth ml or edir adir"><div><div><div></div></div></div></div>
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</body>
```

Expected Results

The results of this test should resemble the results of the reference test at http://test.csswg.org/suites/css2.1/20101210/html4/abspos-non-replaced-width-margin-000-ref.htm

Actual Results

The results do not match the results of the reference test.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because positioning of absolutely positioned non-replaced elements do not align correctly when the **direction** property is set to `rtl` (right to left) and margins left/right are set to auto.

This is discussed in section 2.1.33 "Section 9.10, Text direction: the 'direction' and 'unicode-bidi' properties"

3.1.2 CSS 2.1 Test: abspos-replaced-width-margin-000.htm

Test Case

http://test.csswg.org/suites/css2.1/20101210/html4/abspos-non-replaced-width-margin-000.htm

```
<style type="text/css">

div { height: 1px; direction: ltr; }

/*
 * Every case here has two divs and an image nested inside of each other.  The
 * innermost div (absolutely positioned) is the testcase (and has
 * color).  The middle div's content edge establishes the containing
 * block it would have if it were statically positioned.  The outermost
 * div is actually its containing block.
 *
 * the abs pos containing block runs from 50px to 700px from the left edge
 * the static pos containing block runs from 150px to 650px from the left edge
 */

/* totals for html and body: 21px on the left,  34px on the right */
html, body { border: transparent medium solid; }
html { margin: 0 3px 0 2px; padding: 0 4px 0 3px; border-width: 0 3px 0 8px; }
body { margin: 0 6px 0 3px; padding: 0 7px 0 1px; border-width: 0 11px 0 4px; }

body > div {
  position: relative;

  top: 0;
  left: 4px;

  margin-left: 16px;
  border-left: 9px solid transparent;
  /* sum of above items (29px), plus 21px above, is 50px */
  padding-left: 40px;

  width: 595px;

  padding-right: 15px;
  /* sum of above items (650px), plus 50px above, is 700px */

  border-right: 27px solid transparent;
  margin-right: 13px;
}

body > div > div {
  /* padding-left above: 40px */
  margin-left: 7px;
  border-left: 29px solid transparent;
  padding-left: 24px;
```

```
    /* sum of above items (100px), plus 50px above, is 150px */

    /* padding-right above: 15px */
    padding-right: 14px;
    border-right: 3px solid transparent;
    margin-right: 18px;
    /* sum of above items (50px), subtracted from 700px, is 650px */
  }

  body > div > div > img {
    background: navy;
    position: absolute;
    top: 0;
    bottom: 0;

    /* specify everything; we'll put the autos as overrides below */
    left: 3px;
    margin-left: 17px;
    border-left: 6px solid transparent;
    padding-left: 1px;
    padding-right: 9px;
    border-right: 8px solid transparent;
    margin-right: 19px;
    right: 8px;
  }

  /* now we want to test all 128 combinations of presence of the following */

  body > div.adir { direction: rtl; }
  body > div.sdir > div { direction: rtl; }
  body > div.edir > div > img { direction: rtl; }
  body > div.ol > div > img { left: auto; }
  body > div.or > div > img { right: auto; }
  body > div.ml > div > img { margin-left: auto; }
  body > div.mr > div > img { margin-right: auto; }

  /* combined with each of these three (as appropriate for narrow/wide images) */
  body > div.narrowwidth > div > img { width: 153px; height: 1px; }
  body > div.autowidth > div > img { width: auto; }
  body > div.widewidth > div > img { width: 660px; height: 1px; }

  </style>
  </head>
  <body>

  <div class="autowidth"><div><img alt="" src="support/abspos-replaced-width-margin-000-
  wide.png"></div></div>
  <div class="autowidth adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-
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  <div class="autowidth sdir"><div><img alt="" src="support/abspos-replaced-width-margin-000-
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<div class="autowidth ml sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth ml edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth ml edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth ml edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth ml edir sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth ml ol"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="autowidth ml ol adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth ml ol sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth ml ol sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth ml ol edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth ml ol edir adir"><div><img alt="" src="support/abspos-replaced-width-
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<div class="autowidth ml ol edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth ml ol edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="autowidth ml or"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="autowidth ml or adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth ml or sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth ml or sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth ml or edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth ml or edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth ml or edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth ml or edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="autowidth ml or ol"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth ml or ol adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth ml or ol sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
```

```
<div class="autowidth ml or ol sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="autowidth ml or ol edir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth ml or ol edir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="autowidth ml or ol edir sdir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="autowidth ml or ol edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="autowidth mr"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="autowidth mr adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth mr sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth mr sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth mr edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth mr edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth mr edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth mr edir sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth mr ol"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="autowidth mr ol adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth mr ol sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth mr ol sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth mr ol edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth mr ol edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth mr ol edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth mr ol edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="autowidth mr or"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="autowidth mr or adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth mr or sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth mr or sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth mr or edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth mr or edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth mr or edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth mr or edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="autowidth mr or ol"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="autowidth mr or ol adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
```

```
<div class="autowidth mr or ol sdir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr or ol sdir adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr or ol edir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr or ol edir adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr or ol edir sdir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr or ol edir sdir adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml sdir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml sdir adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml edir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml edir adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml edir sdir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml edir sdir adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml ol"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml ol adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml ol sdir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml ol sdir adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml ol edir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml ol edir adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml ol edir sdir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml ol edir sdir adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or sdir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or sdir adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or edir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or edir adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or edir sdir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or edir sdir adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or ol"><div><img alt="" src="support/abspos-replaced-width-margin-000-narrow.png"></div></div>
```

```
<div class="autowidth mr ml or ol adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or ol sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or ol sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or ol edir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or ol edir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or ol edir sdir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="autowidth mr ml or ol edir sdir adir"><div><img alt="" src="support/abspos-
replaced-width-margin-000-narrow.png"></div></div>

<!-- ***** WIDE WIDTH ***** -->

<!-- nothing auto -->

<div class="widewidth"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="widewidth adir"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="widewidth sdir"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="widewidth sdir adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth edir"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="widewidth edir adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth edir sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth edir sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<!-- only left auto -->
<div class="widewidth ol"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="widewidth ol adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth ol sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth ol sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ol edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth ol edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ol edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ol edir sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<!-- only right auto -->
<div class="widewidth or"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="widewidth or adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth or sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth or sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
```

```
<div class="widewidth or edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth or edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth or edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth or edir sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<!-- left and right auto -->
<div class="widewidth or ol"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="widewidth or ol adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth or ol sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth or ol sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth or ol edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth or ol edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth or ol edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth or ol edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<!-- only margin-left auto -->
<div class="widewidth ml"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="widewidth ml adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth ml sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth ml sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ml edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth ml edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ml edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ml edir sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<!-- left and margin-left auto -->
<div class="widewidth ml ol"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="widewidth ml ol adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth ml ol sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth ml ol sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ml ol edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth ml ol edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ml ol edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ml ol edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<!-- right and margin-left auto (margin-left like 0) -->
<div class="widewidth ml or"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
```

```
<div class="widewidth ml or adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth ml or sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth ml or sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ml or edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth ml or edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ml or edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ml or edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<!-- left and right and margin-left auto (margin-left like 0) -->
<div class="widewidth ml or ol"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth ml or ol adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ml or ol sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ml or ol sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth ml or ol edir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth ml or ol edir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth ml or ol edir sdir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth ml or ol edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<!-- only margin-right auto -->
<div class="widewidth mr"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="widewidth mr adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr edir sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<!-- left and margin-right auto (margin-right like 0) -->
<div class="widewidth mr ol"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="widewidth mr ol adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr ol sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr ol sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr ol edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr ol edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
```

```
<div class="widewidth mr ol edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr ol edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<!-- right and margin-right auto -->
<div class="widewidth mr or"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="widewidth mr or adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr or sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr or sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr or edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr or edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr or edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr or edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<!-- left and right and margin-right auto (margin-right like 0) -->
<div class="widewidth mr or ol"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr or ol adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr or ol sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr or ol sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth mr or ol edir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr or ol edir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth mr or ol edir sdir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth mr or ol edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<!-- margin-left and margin-right auto (alternately like 0) -->
<div class="widewidth mr ml"><div><img alt="" src="support/abspos-replaced-width-margin-000-
narrow.png"></div></div>
<div class="widewidth mr ml adir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr ml sdir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr ml sdir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr ml edir"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr ml edir adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr ml edir sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr ml edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<!-- left and margin-left and margin-right auto (margin-right like 0) -->
<div class="widewidth mr ml ol"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr ml ol adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr ml ol sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
```

```
<div class="widewidth mr ml ol sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth mr ml ol edir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr ml ol edir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth mr ml ol edir sdir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth mr ml ol edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<!-- right and margin-left and margin-right auto (margin-left like 0) -->
<div class="widewidth mr ml or"><div><img alt="" src="support/abspos-replaced-width-margin-
000-narrow.png"></div></div>
<div class="widewidth mr ml or adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr ml or sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr ml or sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth mr ml or edir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr ml or edir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth mr ml or edir sdir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth mr ml or edir sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<!-- left and right and margin-left and margin-right auto (margin-left and margin-right like
0) -->
<div class="widewidth mr ml or ol"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr ml or ol adir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr ml or ol sdir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr ml or ol sdir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth mr ml or ol edir"><div><img alt="" src="support/abspos-replaced-width-
margin-000-narrow.png"></div></div>
<div class="widewidth mr ml or ol edir adir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth mr ml or ol edir sdir"><div><img alt="" src="support/abspos-replaced-
width-margin-000-narrow.png"></div></div>
<div class="widewidth mr ml or ol edir sdir adir"><div><img alt="" src="support/abspos-
replaced-width-margin-000-narrow.png"></div></div>

</body>
```

Expected Results

The results of this test should resemble the results of the reference test at http://test.csswg.org/suites/css2.1/20101210/html4/abspos-replaced-width-margin-000-ref.htm

Actual Results

The results do not match the results of the reference test.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because positioning of absolutely positioned replaced elements do not align correctly when the **direction** property is set to `rtl` (right to left) and margins left/right are set to auto.

This is discussed in section 2.1.33 "Section 9.10, Text direction: the 'direction' and 'unicode-bidi' properties"

3.1.3 CSS 2.1 Test: active-selector-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/active-selector-002.htm

The test case states:

```
<style type="text/css">

   /* Make our document's head visible */
   html { margin: 0; padding: 1em; }
   head { display: block; }
   title, style { display: none; }
   link { display: inline; }
   body { margin: 0; padding: 0; }
   p { margin: 1em 0; }

   /* Make the metadata links invisible */
   [rel="author"], [rel="alternate"], [rel="help"] { display: none; }

   /* The test */
   link:before { content: '1. Link A'; }
   p:active, span:active { color: yellow; border: red solid thick; background: red; }
   .test { color: blue; }
   :link:active, :visited:active { color: white; background: green; border: green solid
thick; }

  </style>
  <link class="test" href="#test" rel="bookmark">
 </head>
 <body>
  <div><a class="test" href="#test">2. Link B</a></div>
  <div><a class="test" href="#test"><span>3. Link C</span></a></div>
  <p>Clicking the links above, or activating them with the keyboard, should make them go
green in exactly the same way.</p>
 </body>
```

Expected Results

Clicking the links in the test, or activating them with the keyboard, should make them go green in exactly the same way.

Actual Results

Link C does not turn green at all and none of the links change to green when they are activated with the keyboard.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the test assumes that the **span** element and the link cannot both be in the active state. However, the [CSS-Level2-2009] specification in section 5.11.3 states:

"CSS 2.1 does not define if the parent of an element that is ':active' or ':hover' is also in that state."

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2010Dec/0149.html .

3.1.4 CSS 2.1 Test: after-content-display-003.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/after-content-display-003.htm

The test case states:

```
<style type="text/css">
  div:after
  {
  content: "Filler text";
  display: list-item;
  margin-left: 1em;
  }
  </style>

 </head>

 <body>

  <p>Test passes if there are <strong>2 lines of "Filler text"</strong>. The 2nd line should
be preceded with a bullet list-marker (a "disc" as a small filled-in circle).</p>

  <div>Filler text</div>

</body>
```

Expected results

Test passes if there are two lines of "Filler text". The second line should be preceded with a bullet list-marker (a "disc" as a small filled-in circle).

Actual results

There is only one line of "Filler text" and there is no bullet list-marker that is rendered.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the `list-item` value of the **display** property has no effect on generated content.

This is discussed in section 2.1.36 "The 'display' property" and also in section 2.1.65 "List: the 'list-style-type', 'list-style-image, 'list-style-position' and 'list-style' properties".

3.1.5 CSS 2.1 Test: allowed-page-breaks-001a.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/allowed-page-breaks-001a.htm

The test case states:

```
<style type="text/css">

  div#strictParent {page-break-inside: avoid;}
  div#permissiveParent {page-break-inside: auto;}

  p {
    margin: 0;
    line-height: 1in;
    page-break-before: avoid;
    page-break-after: avoid;
    widows: 0;
    orphans: 0;
  }

  div#permissiveParent p {
    page-break-before: auto;
    page-break-after: auto;
    widows: 3;
    orphans: 3;
  }

  .dummy {
    width: 0;
  }

  #lefty {page-break-before: left;}
  #alwaysBreak {page-break-before: always;}
</style>
</head>
<body>
  <div id="strictParent">
    <p>This test requires 6 pages. There should be no other content on this page.</p>
    <p class="dummy" id="lefty">a b</p>
    <p>There should be no other content on this page.</p>
    <p class="dummy" id="alwaysBreak">a b</p>
  </div>

  <div id="permissiveParent">
    <p>There should be no other content on this page.</p>
    <p class="dummy">a b c d</p>
  </div>
</body>
```

Expected Results

There should be six pages when printing out the content or when viewing the content on paged media.

Actual Results

There are only three pages of output when viewed on paged media.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

3.1.6 CSS 2.1 Test: allowed-page-breaks-001b.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/allowed-page-breaks-001b.htm

The test case states:

```
<style type="text/css">
  div#strictParent {page-break-inside: avoid;}

  table {
    border-collapse: collapse;
    page-break-after: always;
    widows: 0;
    orphans: 0;
  }

  tr {
    page-break-before: avoid;
    page-break-after: avoid;
  }

  td {
    margin: 0;
    padding: 0;
  }

  #lefty {page-break-before: left;}
  #alwaysBreak {page-break-before: always;}

  div#permissiveParent {page-break-inside: auto;}

  div#permissiveParent table {
    widows: 2;
    orphans: 2;
  }

  div#permissiveParent tr {
    page-break-before: auto;
    page-break-after: auto;
  }
</style>
</head>
<body>
  <div id="strictParent">
    <table>
      <tr>
        <td>This test requires 6 pages. There should be no other content on this page.</td>
      </tr>
      <tr id="lefty">
        <td>a</td>
      </tr>
      <tr>
        <td>b</td>
      </tr>
    </table>

    <table>
```

```
      <tr>
        <td>There should be no other content on this page.</td>
      </tr>
      <tr id="alwaysBreak">
        <td>a</td>
      </tr>
      <tr>
        <td>b</td>
      </tr>
    </table>
  </div>

  <div id="permissiveParent">
    <table>
      <tr>
        <td>There should be an 'a' and a 'b' on this page.</td>
      </tr>
      <tr>
        <td>a</td>
      </tr>
      <tr>
        <td>b</td>
      </tr>
      <tr>
        <td>c</td>
      </tr>
      <tr>
        <td>d</td>
      </tr>
    </table>
  </div>

</body>
```

Expected results

There should be six pages when printing out the content or when viewing the content on paged media.

Actual results

There are nine pages when printing out the content or when viewing the content in a print preview.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

This test case fails because extra pages are generated when setting page-break properties on tables.

This is discussed in section 2.1.69, "Page break properties: 'page-break-before', 'page-break-after', 'page-break-inside'"

3.1.7 CSS 2.1 Test: allowed-page-breaks-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/allowed-page-breaks-002.htm

The test case states:

```
<style type="text/css">
  html, body {height: 100%;}
  div {
    widows: 0;
    orphans: 0;
  }

  * {page-break-inside: auto;}
  div.spacer {
    height: 100%;
    margin-bottom: -4em;
  }
  div.dummy {
    width: 0;
    page-break-after: always;
  }

  div#second {orphans: 6;}
  div#third {widows: 6;}
  div#fourth {page-break-inside: avoid;}
</style>
</head>
<body>
  <div class="spacer">This test requires 8 pages. The text below this line should break after
'c'.</div>
  <div class="dummy">a b c d e f</div>

  <div class="spacer">The letters after this line should appear on the next page.</div>
  <div class="dummy" id="second">a b c d e f</div>

  <div class="spacer">The letters after this line should appear on the next page.</div>
  <div class="dummy" id="third">a b c d e f</div>

  <div class="spacer">The letters after this line should appear on the next page.</div>
  <div class="dummy" id="fourth">a b c d e f</div>
</body>
```

Expected results

There should be eight pages when printing out the content or when viewing the content in a print preview mode. The first page should have the letters "a", "b", and "c" each on their own line and then a line break after those three lines.

Actual results

The letters "a", "b", and "c" are not visible pages when printing out the content or when viewing the content in a print preview mode.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because of the negative value for the **margin-bottom** property that is applied to the `spacer` class.

Content outside the page box is discarded when negative margins are used.

This is discussed in section 2.1.26 " Section 8.3, Margin properties: 'margin-top', 'margin-right', 'margin-bottom', 'margin-left', and 'margin'".

3.1.8 CSS 2.1 Test: before-after-table-whitespace-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/before-after-table-whitespace-001.htm

The test case states:

```
<style type="text/css">
.gen0:before {
  padding:1px;
}
.gen1:before {
  content: " ";
}
.gen2:before {
  content: attr(missing);
}
.gen3:before {
  content: url(missing-image.png);
}

div { border:1px solid green; margin:5px; }
</style>
</head>

<!-- This tests that generated content items that evaluate to empty strings or
     broken images are *not* treated as whitespace text and ignored by the table.
     Altogether missing content should be ignored, though. (In fact it won't even be
generated.) -->

<body>
<div>
  <table><tbody><tr class="gen0"><td>Cell0</td></tr>
                <tr><td>Cell1</td><td>Cell2</td></tr></tbody></table>
</div>
<div>
  <table><tbody><tr class="gen1"><td>Cell0</td></tr>
                <tr><td>Cell1</td><td>Cell2</td></tr></tbody></table>
</div>
<div>
  <table><tbody><tr class="gen2"><td>Cell0</td></tr>
                <tr><td>Cell1</td><td>Cell2</td></tr></tbody></table>
</div>
<div>
  <table><tbody><tr class="gen3"><td>Cell0</td></tr>
                <tr><td>Cell1</td><td>Cell2</td></tr></tbody></table>
</div>


</body>
```

Expected Results

The results of the test should be similar to the reference test at http://test.csswg.org/suites/css2.1/20101210/html4/before-after-table-whitespace-001-ref.htm.

Actual Results

The results do not match the reference test.

It is clear that IE9 fails this test by comparing the expected results with the actual results.

The test fails because generated white space is not properly collected into the correct cells and extra anonymous tables are created.

3.1.9 CSS 2.1 Test: before-content-display-003.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/before-content-display-003.htm

The test case states:

```
<style type="text/css">
  div:before
  {
  content: "Filler text";
  display: list-item;
  margin-left: 1em;
  }
  </style>

 </head>

 <body>

  <p>Test passes if there are <strong>2 lines of "Filler text"</strong>. The top "Filler
text" should be preceded with a bullet marker (a "disc" as a small filled-in circle).</p>

  <div>Filler text</div>

 </body>
```

Expected Results

Test passes if there are two lines of "Filler text". The top "Filler text" should be preceded with a bullet marker (a "disc" as a small filled-in circle).

Actual Results

No bullets markers are rendered.

The test case fails because the `list-item` value of the **display** property has no effect on generated content.

This is discussed in section 2.1.36 "The ‘display’ property" and also in section 2.1.65 "List: the ‘list-style-type’, ‘list-style-image, ‘list-style-position’ and 'list-style' properties".

3.1.10 CSS 2.1 Test: bidi-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/bidi-002.htm

The test case states:

```
<style type="text/css">
   div p { width: 17em; border: solid; margin: 1em; padding: 0.5em; background: #FFFFCC;
color: black; }
   .test { border: solid; padding: 0.4em 1em; line-height: 3em; color: navy; }
   .control { line-height: 3em; color: navy; }
   .control.a { border-style: solid none solid solid; padding: 0.4em 0 0.4em 1em;  }
   .control.b { border-style: solid solid solid none; padding: 0.4em 1em 0.4em 0;  }
  </style>
 </head>
 <body>
  <p> The following two blocks should be identical, including overflow. (Force bidi: ‮) </p>
  <div>
   <p>
    <span class="control a">AAABBBCCC</span>DDDEEEFFF<span class="control b">GGGHHHIII</span>
    JJJKKKLLLMMMNNNOOO
   </p>
   <p>
    <span class="test">AAABBBCCC&#x202E;IIIHHHGGG</span>FFFEEEDDD
    LLLKKKJJJ&#x202C;MMMNNNOOO
   </p>
  </div>
 </body>
```

Expected results

The two blocks should be identical, including overflow.

Actual results

The two blocks are not identical because there is no overflow on the first **span** element of the second block.

It is clear that IE9 fails this test by comparing the expected results with the actual results.

This test fails because the Unicode 'RIGHT-TO-LEFT-OVERRIDE' (U+202E) character changes the position of surrounding white space, thus affecting white-space collapsing.

This is discussed in section 2.1.83 "Section 16.6.2, Example of bidirectionality with white space collapsing".

3.1.11 CSS 2.1 Test: bidi-004.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/bidi-004.htm

The test case states:

```
<style type="text/css">
   div p { float: left; clear: left; border: solid; margin: 1em; padding: 0.5em; background:
#FFFFCC; color: black; }
   .test { border: solid; padding: 0.4em 1em; line-height: 3em; }
   .control { line-height: 3em; }
   .control.start { border-style: solid none solid solid; padding: 0.4em 0 0.4em 1em;  }
   .control.middle { border-style: solid none solid none; padding: 0.4em 0 0.4em 0;  }
   .control.end { border-style: solid solid solid none; padding: 0.4em 1em 0.4em 0;  }
   .a { color: navy; }
```

```
    .b { color: orange; }
   </style>
  </head>
  <body>
   <p> The following two blocks should be identical, including overflow. (Force bidi: ℵ) </p>
   <div>
    <p>
     <span class="control a start"> aaa bbb ccc ddd eee </span> <br>
     <span class="control b start"> fff                 </span>
                                    ggg hhh iii
     <span class="control a end">   jjj                 </span> <br>
     <span class="control b end">   kkk lll mmm nnn ooo </span>
    </p>
    <p>
     <span class="test a"> aaa         bbb          ccc &#x202E; eee                      ddd
<br>
                           jjj </span> iii          hhh          ggg <span class="test b"> fff
<br>
                           lll         kkk &#x202C; mmm          nnn                      ooo
</span>
    </p>
   </div>
  </body>
```

Expected results

The two blocks should be identical, including overflow.

Actual results

The two blocks are not identical because there is no space between "lll" and "mmm" in the last **span** element of the second block.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because Unicode 'RIGHT-TO-LEFT-OVERRIDE' (U+202E) character changes the position of surrounding white space, thus affecting white-space collapsing.

This is discussed in section 2.1.83 "Section 16.6.2, Example of bidirectionality with white space collapsing".

3.1.12 CSS 2.1 Test: bidi-005.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/bidi-005.htm

The test case states:

```
<style type="text/css">
   div p { white-space: pre; margin: 1em; padding: 0.75em; background: black; color: yellow;
font: 2em/1 serif; letter-spacing: 1em; }
   .one, .c, .j, .e { color: aqua; }
   .two, .i, .d, .k, .b { color: fuchsia; }
   .one, .two { border: solid; padding: 0.1em 0 0.1em 0; margin: 0 0.5em 0 0.5em; }
   .c, .b { border-style: solid none solid solid; padding: 0.1em 0 0.1em 0; margin: 0 0 0
0.5em; }
```

```
   .j, .k { border-style: solid solid solid none; padding: 0.1em 0 0.1em 0; margin: 0 0.5em 0
0; }
   .e, .i, .d { border-style: solid none solid none; padding: 0.1em 0 0.1em 0; margin: 0 0 0
0; }
  </style>
 </head>
 <body>
  <p> The following two blocks should be identical, including overflow. (Force bidi: ‏) </p>
  <div>
   <p class="reference"><span class="a">a</span><span class="b">b</span><span
class="c">c</span><span class="d">d</span><span class="e">e</span><span
class="f">f</span><span class="g">g</span><span class="h">h</span><span
class="i">i</span><span class="j">j</span><span class="k">k</span><span
class="l">l</span><span class="m">m</span></p>
   <p class="test">a&#x202E;l&#x202D;<span
class="one">c&#x202E;j&#x202D;e&#x202E;</span>h&#x202D;g&#x202C;f<span
class="two">&#x202C;i&#x202C;d&#x202C;k&#x202C;b</span>&#x202C;m</p>
  </div>
 </body>
```

Expected results

The two blocks should be identical, including overflow.

Actual results

The two blocks are not identical.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because Unicode 'RIGHT-TO-LEFT-OVERRIDE' (U+202E) character changes the position of surrounding white space, thus affecting white-space collapsing.

This is discussed in section 2.1.83 "Section 16.6.2, Example of bidirectionality with white space collapsing".

3.1.13 CSS 2.1 Test: bidi-006.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/bidi-006.htm

The test case states:

```
<style type="text/css">
   div p { white-space: nowrap; margin: 1em; padding: 0.75em; background: black; color:
yellow; font: 2em/1 serif; letter-spacing: 1em; }
   .one, .c, .j, .e { color: aqua; }
   .two, .i, .d, .k, .b { color: fuchsia; }
   .one, .two { border: solid; padding: 0.1em 0 0.1em 0; margin: 0 0.5em 0 0.5em; }
   .c, .b { border-style: solid none solid solid; padding: 0.1em 0 0.1em 0; margin: 0 0 0
0.5em; }
   .j, .k { border-style: solid solid solid none; padding: 0.1em 0 0.1em 0; margin: 0 0.5em 0
0; }
   .e, .i, .d { border-style: solid none solid none; padding: 0.1em 0 0.1em 0; margin: 0 0 0
0; }
  </style>
 </head>
```

```
 <body>
  <p> The following two blocks should be identical, including overflow. (Force bidi: ‏) </p>
  <div>
   <p class="reference"><span class="a">a</span><span class="b">b</span><span
class="c">c</span><span class="d">d</span><span class="e">e</span><span
class="f">f</span><span class="g">g</span><span class="h">h</span><span
class="i">i</span><span class="j">j</span><span class="k">k</span><span
class="l">l</span><span class="m">m</span></p>
   <p class="test">a&#x202E;l&#x202D;<span
class="one">c&#x202E;j&#x202D;e&#x202E;</span>h&#x202D;g&#x202C;f<span
class="two">&#x202C;i&#x202C;d&#x202C;k&#x202C;b</span>&#x202C;m</p>
  </div>
 </body>
```

Expected results

The two blocks should be identical, including overflow.

Actual results

The two blocks are not identical.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because Unicode 'RIGHT-TO-LEFT-OVERRIDE' (U+202E) character changes the position of surrounding white space, thus affecting white-space collapsing.

This is discussed in section 2.1.83 "Section 16.6.2, Example of bidirectionality with white space collapsing".

3.1.14 CSS 2.1 Test: bidi-007.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/bidi-007.htm

The test case states:

```
<style type="text/css">
   div p { float: left; clear: left; margin: 0.5em 1em; padding: 0.75em; background: black;
color: yellow; font: 2em/1 serif; letter-spacing: 1em; }
   .one, .c, .j, .e { color: aqua; }
   .two, .i, .d, .k, .b { color: fuchsia; }
   .one, .two { border: solid; padding: 0.1em 0 0.1em 0; margin: 0 0.5em 0 0.5em; }
   .c, .b { border-style: solid none solid solid; padding: 0.1em 0 0.1em 0; margin: 0 0 0
0.5em; }
   .j, .k { border-style: solid solid solid none; padding: 0.1em 0 0.1em 0; margin: 0 0.5em 0
0; }
   .e, .i, .d { border-style: solid none solid none; padding: 0.1em 0 0.1em 0; margin: 0 0 0
0; }
  </style>
 </head>
 <body>
  <p> The following two blocks should be identical, including overflow. (Force bidi: ‏) </p>
  <div>
   <p class="reference"><span class="a">a</span><span class="b">b</span><span
class="c">c</span><span class="d">d</span><span class="e">e</span><span
class="f">f</span><span class="g">g</span><span class="h">h</span><span
```

```
class="i">i</span><span class="j">j</span><span class="k">k</span><span
class="l">l</span><span class="m">m</span></p>
   <p class="test">a&#x202E;l&#x202D;<span
class="one">c&#x202E;j&#x202D;e&#x202E;</span>h&#x202D;g&#x202C;f<span
class="two">&#x202C;i&#x202C;d&#x202C;k&#x202C;b</span>&#x202C;m</p>
  </div>
 </body>
```

Expected results

The two blocks should be identical, including overflow.

Actual results

The two blocks are not identical.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because Unicode 'RIGHT-TO-LEFT-OVERRIDE' (U+202E) character changes the position of surrounding white space, thus affecting white-space collapsing.

This is discussed in section 2.1.83 "Section 16.6.2, Example of bidirectionality with white space collapsing".

3.1.15 CSS 2.1 Test: bidi-008.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4_bidi-008.htm

The test case states:

```
<style type="text/css">
   div p { display: table; margin: 1em; padding: 0.75em; background: black; color: yellow;
font: 2em/1 serif; letter-spacing: 1em; }
   .one, .c, .j, .e { color: aqua; }
   .two, .i, .d, .k, .b { color: fuchsia; }
   .one, .two { border: solid; padding: 0.1em 0 0.1em 0; margin: 0 0.5em 0 0.5em; }
   .c, .b { border-style: solid none solid solid; padding: 0.1em 0 0.1em 0; margin: 0 0 0
0.5em; }
   .j, .k { border-style: solid solid solid none; padding: 0.1em 0 0.1em 0; margin: 0 0.5em 0
0; }
   .e, .i, .d { border-style: solid none solid none; padding: 0.1em 0 0.1em 0; margin: 0 0 0
0; }
  </style>
 </head>
 <body>
  <p> The following two blocks should be identical, including overflow. (Force bidi: ‏) </p>
  <div>
   <p class="reference"><span class="a">a</span><span class="b">b</span><span
class="c">c</span><span class="d">d</span><span class="e">e</span><span
class="f">f</span><span class="g">g</span><span class="h">h</span><span
class="i">i</span><span class="j">j</span><span class="k">k</span><span
class="l">l</span><span class="m">m</span></p>
   <p class="test">a&#x202E;l&#x202D;<span
class="one">c&#x202E;j&#x202D;e&#x202E;</span>h&#x202D;g&#x202C;f<span
class="two">&#x202C;i&#x202C;d&#x202C;k&#x202C;b</span>&#x202C;m</p>
  </div>
```

```
</body>
```

Expected results

The two blocks should be identical, including overflow.

Actual results

The two blocks are not identical.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because Unicode 'RIGHT-TO-LEFT-OVERRIDE' (U+202E) character changes the position of surrounding white space, thus affecting white-space collapsing.

This is discussed in section 2.1.83 "Section 16.6.2, Example of bidirectionality with white space collapsing".

3.1.16 CSS 2.1 Test: bidi-009.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/bidi-009.htm

The test case states:

```
<style type="text/css">
   div { margin: 1em; padding: 0.75em; background: black; color: yellow;
         letter-spacing: 1em; font: 2em/1 serif; }
   div p { display: table-row; }
   .one, .c, .j, .e { color: aqua; }
   .two, .i, .d, .k, .b { color: fuchsia; }
   .one, .two { border: solid; padding: 0.1em 0 0.1em 0; margin: 0 0.5em 0 0.5em; }
   .c, .b { border-style: solid none solid solid; padding: 0.1em 0 0.1em 0; margin: 0 0 0
0.5em; }
   .j, .k { border-style: solid solid solid none; padding: 0.1em 0 0.1em 0; margin: 0 0.5em 0
0; }
   .e, .i, .d { border-style: solid none solid none; padding: 0.1em 0 0.1em 0; margin: 0 0 0
0; }
  </style>
 </head>
 <body>
  <p> The following two blocks should be identical, including overflow. (Force bidi: ℵ) </p>
  <div>
   <p class="reference"><span class="a">a</span><span class="b">b</span><span
class="c">c</span><span class="d">d</span><span class="e">e</span><span
class="f">f</span><span class="g">g</span><span class="h">h</span><span
class="i">i</span><span class="j">j</span><span class="k">k</span><span
class="l">l</span><span class="m">m</span></p>
  </div>
  <div>
   <p class="test">a&#x202E;l&#x202D;<span
class="one">c&#x202E;j&#x202D;e&#x202E;</span>h&#x202D;g&#x202C;f<span
class="two">&#x202C;i&#x202C;d&#x202C;k&#x202C;b</span>&#x202C;m</p>
  </div>
 </body>
```

Expected results

The two blocks should be identical, including overflow.

Actual results

The two blocks are not identical.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because Unicode 'RIGHT-TO-LEFT-OVERRIDE' (U+202E) character changes the position of surrounding white space, thus affecting white-space collapsing.

This is discussed in section 2.1.83 "Section 16.6.2, Example of bidirectionality with white space collapsing".

3.1.17 CSS 2.1 Test: bidi-010.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/bidi-010.htm

The test case states:

```
<style type="text/css">
   div p { position: absolute; margin: 1em; padding: 0.75em; background: black; color:
yellow; font: 2em/1 serif; letter-spacing: 1em; }
   .reference { top: 1em; }
   .test { top: 4em; }
   .one, .c, .j, .e { color: aqua; }
   .two, .i, .d, .k, .b { color: fuchsia; }
   .one, .two { border: solid; padding: 0.1em 0 0.1em 0; margin: 0 0.5em 0 0.5em; }
   .c, .b { border-style: solid none solid solid; padding: 0.1em 0 0.1em 0; margin: 0 0 0
0.5em; }
   .j, .k { border-style: solid solid solid none; padding: 0.1em 0 0.1em 0; margin: 0 0.5em 0
0; }
   .e, .i, .d { border-style: solid none solid none; padding: 0.1em 0 0.1em 0; margin: 0 0 0
0; }
  </style>
 </head>
 <body>
  <p> The following two blocks should be identical, including overflow. (Force bidi: ‮) </p>
  <div>
   <p class="reference"><span class="a">a</span><span class="b">b</span><span
class="c">c</span><span class="d">d</span><span class="e">e</span><span
class="f">f</span><span class="g">g</span><span class="h">h</span><span
class="i">i</span><span class="j">j</span><span class="k">k</span><span
class="l">l</span><span class="m">m</span></p>
   <p class="test">a&#x202E;l&#x202D;<span
class="one">c&#x202E;j&#x202D;e&#x202E;</span>h&#x202D;g&#x202C;f<span
class="two">&#x202C;i&#x202C;d&#x202C;k&#x202C;b</span>&#x202C;m</p>
  </div>
 </body>
```

Expected results

The two blocks should be identical, including overflow.

Actual results

The two blocks are not identical.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because Unicode 'RIGHT-TO-LEFT-OVERRIDE' (U+202E) character changes the position of surrounding white space, thus affecting white-space collapsing.

This is discussed in section 2.1.83 "Section 16.6.2, Example of bidirectionality with white space collapsing".

3.1.18 CSS 2.1 Test: bidi-011.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/bidi-011.htm

The test case states:

```
<style type="text/css">
   div div { border: solid black; color: navy; margin: 1em; padding: 1em; font: 2em
monospace; }
   span { border: solid orange; padding: 0.1em 1em; margin: 0.1em 1em; background: yellow; }
  </style>
 </head>
 <body>
  <p> The following two lines should be identical. (Force bidi: ℵ) </p>
  <div>
   <div class="test">TE<span>&#x202E;TSET</span>&#x202D;ST </div>
   <div class="reference">TEST<span>TEST</span></div>
  </div>
 </body>
```

Expected results

The two lines should be identical, including overflow.

Actual results

The two blocks are not identical.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because Unicode 'RIGHT-TO-LEFT-OVERRIDE' (U+202E) character changes the position of surrounding white space, thus affecting white-space collapsing.

This is discussed in section 2.1.83 "Section 16.6.2, Example of bidirectionality with white space collapsing".

3.1.19 CSS 2.1 Test: bidi-breaking-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/bidi-breaking-002.htm

The test case states:

```
<style type="text/css">
```

```
      /* Make test easier to read */
     .test, .control {
       color: blue;
       font: bold larger monospace;
       margin: 1em;
       padding: 0.25em;
       border: solid silver;
       float: left;
     }
     .set {
       clear: both;
       float: left;
       border-bottom: solid orange;
     }
     p + .set {
       border-top: solid orange;
     }

     /* ensure BDO processing */
     bdo {
       unicode-bidi: bidi-override;
       direction: ltr;
     }

     /* Enable preservation of source line breaks
        (and PS and LS for certain nonconformant ws-collapsing implementations) */
     .pre {
       white-space: pre; white-space: pre-lines;
     }
   </style>
 </head>
 <body>
   <p>In each pair of silver boxes below, the two patterns must be identical.</p>

   <!-- control for bidi support -->
   <div class="set">
     <div class="test">
       <div>&rlm;  + - &times; &divide; א</div>
       <div>ת + - &times; &divide;  &rlm;</div>
     </div>
     <div class="control">
       <div><bdo dir="ltr">א &divide; &times; - +  </bdo></div>
       <div><bdo dir="ltr">  &divide; &times; - + ת</bdo></div>
     </div>
   </div>

   <!-- preserved source line break breaks bidi paragraph -->
   <div class="set">
     <div class="test">
       <div class="pre">א + - &times; &divide;  
   + - &times; &divide; ת</div>
     </div>
     <div class="control">
       <div><bdo dir="ltr">א + - &times; &divide;  </bdo></div>
       <div><bdo dir="ltr">  + - &times; &divide; ת</bdo></div>
     </div>
   </div>

   <!-- <br> on shaky ground since HTML4 said it's an LS, but HTML5 will
```

```
        likely side with PS due to better bidi safety; leaving as PS for now -->
    <div class="set">
      <div class="test">
         + א- &times; &divide;  <br>
          + - &times; &divide; ת
      </div>
      <div class="control">
        <div><bdo dir="ltr">א + - &times; &divide;  </bdo></div>
        <div><bdo dir="ltr">  + - &times; &divide; ת</bdo></div>
      </div>
    </div>
  </body>
```

Expected results

In each pair of silver boxes, the two patterns must be identical.

Actual results

The two patterns in each pair of silver boxes are not identical because the text runs that are in the last pair of silver boxes are not identical.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the **br** element is treated as a line separator even though the test expects it to be treated as a paragraph separator.

3.1.20 CSS 2.1 Test: bidi-breaking-003.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/bidi-breaking-003.htm

The test case states:

```
  <style type="text/css">
       /* Make test easier to read */
      .test, .control {
        color: blue;
        font: bold larger monospace;
        margin: 1em;
        padding: 0.25em;
        border: solid silver;
        float: left;
      }
      .set {
        clear: both;
        float: left;
        border-bottom: solid orange;
      }
      p + .set {
        border-top: solid orange;
      }

      /* ensure BDO processing */
      bdo {
        unicode-bidi: bidi-override;
```

```
      direction: ltr;
    }

    /* Enable preservation of source line breaks
       (and PS and LS for certain nonconformant ws-collapsing implementations) */
    .pre {
      white-space: pre; white-space: pre-lines;
    }
  </style>
</head>
<body>
  <p>In each pair of silver boxes below, the two patterns must be identical.</p>

  <!-- control for bidi support -->
  <div class="set">
    <div class="test">
      <div>&rlm;  + - &times; &divide; א</div>
      <div>ת + - &times; &divide;  &rlm;</div>
    </div>
    <div class="control">
      <div><bdo dir="ltr">א &divide; &times; - +  </bdo></div>
      <div><bdo dir="ltr">  &divide; &times; - + ת</bdo></div>
    </div>
  </div>

  <!-- paragraph separator breaks bidi paragraph -->
  <div class="set">
    <div class="test">
      <div class="pre">א + - &times; &divide;  &#x2029;  + - &times; &divide;
<vid/>ת
    </div>
    <div class="control">
      <div><bdo dir="ltr">א + - &times; &divide;  </bdo></div>
      <div><bdo dir="ltr">  + - &times; &divide; ת</bdo></div>
    </div>
  </div>

  <!-- line separator does not break bidi paragraph -->
  <div class="set">
    <div class="test">
      <div class="pre">&rlm;  + - &times; &divide; א&#x2028;  + - &times; &divide;
<vid/>ת
    </div>
    <div class="control">
      <div><bdo dir="ltr">א + - &times; &divide;  </bdo></div>
      <div><bdo dir="ltr">  + - &times; &divide; ת</bdo></div>
    </div>
  </div>

<!--
PS &#x2029;
LS &#x2028;
-->
</body>
```

Expected results

In each pair of silver boxes, the two patterns must be identical.

Actual results

The two patterns in each pair of silver boxes are not identical because the text runs that are in the last pair of silver boxes are not identical.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the **br** element is treated as a line separator even though the test expects it to be treated as a paragraph separator.

3.1.21 CSS 2.1 Test: character-encoding-017.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/character-encoding-017.htm

The test case states:

```
<style type="text/css">
/* the CSS below is not part of the test */
.test { font-size: 40px; }
.test img { vertical-align: middle;  }
.test td { padding-right: 60px; }
</style>
<link rel="stylesheet" type="text/css" href="support/bom-charset15.css">
</head>
<body>
<p class="instructions">Test passes if there is a green rectangle below.</p>


<div class="test"><span style="background-color: #00FF00; color: #00FF00;"><span
class="hello">text</span></span></div>


<!--p class="notes">Notes: <br />The HTML page is served as ISO 8859-1. The CSS starts with a
UTF-8 signature but also has an @charset rule declaring the encoding to be ISO 8859-1. The
CSS 2.1 spec says that the whole stylesheet should be abandoned in that case.</p-->
</body>
```

In the stylesheet "bom-charset15.css":

```
@charset "iso-8859-15";
.hello {
  background-color: #FF0000;
  font-weight: bold;
  color: red;
  font-family: Arial, Helvetica, sans-serif;
  }
```

Expected results

There is supposed to be a green rectangle drawn for this test.

Actual results

There is a small green line at the bottom of a red rectangle but there is no green rectangle that is visible.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the style sheet should be abandoned when it starts with a byte order mark (in this case, EF BB BF) and a conflicting **@charset** declaration. Instead, the style sheet is not abandoned.

This is discussed in section 2.1.9 "4.4 CSS style representation".

3.1.22 CSS 2.1 Test: charset-attr-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/charset-attr-001.htm

The test case states:

```
<style type="text/css">
      body { color: red; }
    </style>
    <link type="text/css" charset="UTF-16BE" rel="stylesheet" href="support/charset-attr-
001.css">
  </head>
  <body>
    This should be green



</body>
```

In the stylesheet "charset-attr-001.css":

```
b o d y   {   c o l o r :   g r e e n ;   }
```

Expected results

The text "This should be green" should be green.

Actual results

The text "This should be green" is red.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the **charset** attribute on a **link** element is ignored.

This is discussed in section 2.1.9 "4.4 CSS style representation".

3.1.23 CSS 2.1 Test: containing-block-032.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/containing-block-032.htm

The test case states:

```
<style type="text/css">
  div
  {
  color: red;
  direction: ltr;
  font: 100px/2 Ahem;
  width: 4em;
  }

  span {position: relative;}

  span span
  {
  background-color: green;
  height: 1em;
  position: absolute;
  width: 1em;
  }

  #top-left
  {
  left: 0;
  top: 0;
  }

  #top-right
  {
  right: 0;
  top: 0;
  }

  #bottom-left
  {
  bottom: 0;
  left: 0;
  }

  #bottom-right
  {
  bottom: 0;
  right: 0;
  }
  </style>

 </head>

 <body>

  <p>Test passes if there is no red. Four distinct green squares should appear.</p>

  <div>
  a
  <span>
   <span id="top-left"></span>
   <span id="top-right"></span>
   <span id="bottom-left"></span>
   <span id="bottom-right"></span>
```

```
 b c</span>
d
</div>

</body>
```

Expected results

There should be no red and there should only be four green squares.

Actual results

There are two red squares and two green rectangles.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because when an inline element breaks across lines, the **top**, **right**, **bottom** and **left** properties are relative to those of the first line box.

This is discussed in section 2.1.37 "Section 9.3.1, Choosing a positioning scheme: 'position' property".

3.1.24 CSS 2.1 Test: counter-reset-increment-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/counter-reset-increment-002.htm

The test case states:

```
<style type="text/css">
  ol
  {
  counter-reset: list-item -4;
  list-style-type: none;
  }

  li:before
  {
  content: counter(list-item) ". ";
  counter-increment: list-item;
  }
  </style>

 </head>

 <body>

  <p>The two columns of numbers should be <strong>identical</strong>.</p>

  <ol>
    <li> -3. </li>
    <li> -2. </li>
    <li> -1. </li>
    <li> 0. </li>
    <li> 1. </li>
    <li> 2. </li>
```

```
    <li> 3. </li>
  </ol>

 </body>
```

Expected results

The two columns of numbers should be identical.

Actual results

The two columns of numbers are not identical.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because counters reset by a parent element are not used by the child elements when counting. The **counter-increment** property can only be used outside of pseudo-elements.

This is discussed in section 2.1.62 "Section 12.4.1,Nested counters and scope".

3.1.25 CSS 2.1 Test: dynamic-top-change-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/dynamic-top-change-001.htm

The test case states:

```
<style type="text/css">
    .testDiv { position: absolute; width: 100px; height: 100px; }
    #green { top: 4em; background: green; }
    #red { top: inherit; background: red; }
    #parent { top: inherit; position: relative; }
    #grandparent { position: relative; }
  </style>
  <script type="text/javascript">
    window.onload = function() {
      document.body.offsetWidth;
      document.getElementById("grandparent").style.top = "2em";
    }
  </script>
 </head>
 <body>
   <p>There should be no red.</p>
   <div id="grandparent">
     <div id="parent">
       <div id="red" class="testDiv"></div>
     </div>
     <div id="green" class="testDiv"></div>
   </div>
 </body>
```

Expected results

There should be no red.

Actual Results

There is a red rectangle above a green square.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the `inherit` value does not inherit from a style that has been dynamically changed.

This is discussed in section 2.1.19 "Section 6.2.1, The 'inherit' value".

3.1.26 CSS 2.1 Test: dynamic-top-change-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/dynamic-top-change-002.htm

The test case states:

```
<style type="text/css">
    .testDiv { width: 100px; height: 100px; }
    #green { top: 4em; background: green; position: absolute; }
    #red { top: inherit; background: red; position: relative; }
    #parent { position: absolute; top: 2em; }
    #intermediate { display: table-row; }
  </style>
  <script type="text/javascript">
    window.onload = function() {
      document.body.offsetWidth;
      document.getElementById("intermediate").style.top = "2em";
    }
  </script>
 </head>
 <body>
   <p>There should be no red.</p>
   <div id="parent">
     <div id="intermediate">
       <div id="red" class="testDiv"></div>
     </div>
   </div>
   <div id="green" class="testDiv"></div>
 </body>
```

Expected results

There should be no red.

Actual Results

There is a red rectangle above a green square.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the **inherit** keyword does not inherit from a style that has been dynamically changed.

This is discussed in section 2.1.19 "Section 6.2.1, The 'inherit' value".

3.1.27 CSS 2.1 Test: dynamic-top-change-003.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/dynamic-top-change-003.htm

The test case states:

```
<style type="text/css">
    .testDiv { width: 100px; height: 100px; }
    #green { top: 4em; background: green; position: absolute; }
    #red { top: inherit; background: red; position: relative; }
    #parent { position: absolute; top: 2em; }
    #intermediate { display: table; }
  </style>
  <script type="text/javascript">
    window.onload = function() {
      document.body.offsetWidth;
      document.getElementById("intermediate").style.top = "2em";
    }
  </script>
 </head>
 <body>
   <p>There should be no red.</p>
   <div id="parent">
     <div id="intermediate">
       <div id="red" class="testDiv"></div>
     </div>
   </div>
   <div id="green" class="testDiv"></div>
 </body>
```

Expected results

There should be no red.

Actual Results

There is a red rectangle above a green square.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the **inherit** keyword does not inherit from a style that has been dynamically changed.

This is discussed in section 2.1.19 "Section 6.2.1, The 'inherit' value".

3.1.28 CSS 2.1 Test: dynamic-top-change-004.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/dynamic-top-change-004.htm

The test case states:

```
<style type="text/css">
    .testDiv { width: 100px; height: 100px; }
```

```
      #green { top: 4em; background: green; position: absolute; }
      #red { top: inherit; background: red; position: relative; }
      #parent { position: absolute; }
    </style>
    <script type="text/javascript">
      window.onload = function() {
        document.body.offsetWidth;
        document.getElementById("parent").style.top = "2em";
      }
    </script>
  </head>
  <body>
    <p>There should be no red.</p>
    <div id="parent">
      <div id="red" class="testDiv"></div>
    </div>
    <div id="green" class="testDiv"></div>
  </body>
```

Expected results

There should be no red.

Actual Results

There is a red rectangle above a green square.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the **inherit** keyword does not inherit from a style that has been dynamically changed.

This is discussed in section 2.1.19 "Section 6.2.1, The 'inherit' value".

3.1.29 CSS 2.1 Test: dynamic-top-change-005.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/dynamic-top-change-005.htm

The test case states:

```
<style type="text/css">
    .testDiv { position: relative; width: 100px; height: 100px; }
    #green { top: 100px; background: green; }
    #red { top: inherit; background: red; display: block; }
    #parent { position: relative; }
    body > p { position: absolute; font-size: medium; }
    #grandparent { position: absolute; top: 0; }
    body { font-size: 0; line-height: 0; position: relative; }
  </style>
  <script type="text/javascript">
    window.onload = function() {
      document.body.offsetWidth;
      document.getElementById("parent").style.top = "50px";
    }
  </script>
```

```
</head>
<body>
  <p>There should be no red.</p>
  <div id="grandparent">
    <span id="parent">
      <span id="red" class="testDiv"></span>
    </span>
  </div>
  <div id="green" class="testDiv"></div>
</body>
```

Expected results

There should be no red.

Actual Results

There is a red rectangle above a green square.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the **inherit** keyword does not inherit from a style that has been dynamically changed.

This is discussed in section 2.1.19 "Section 6.2.1, The 'inherit' value".

3.1.30 CSS 2.1 Test: first-letter-dynamic-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/first-letter-dynamic-002.htm

The test case states:

```
<script type="text/javascript">
function boom1()
{
  initFuzzerSpecific();
  setTextContent(stylesheets[1], "*:first-letter { }");
  setTextContent(stylesheets[2], "*:before { counter-reset: chicken; }");
  document.body.offsetWidth;
  boom2();
}

function boom2()
{
  setTextContent(stylesheets[3], "#q2:first-letter { content: 'generated'; }");
  setTextContent(stylesheets[1], "");
  setTextContent(stylesheets[4], "#q2 { quotes: '<1>' '</1>'; }");
  document.body.offsetWidth;
  boom3();
}

function boom3()
{
  document.getElementById("p2").style.counterReset = "egg";
  setTextContent(stylesheets[1], "*:first-letter { }");
```

```
}

function setTextContent(n, t) { n.textContent = t; }

var stylesheets = [];
function initFuzzerSpecific()
{
  var myStylesheetHolder = document.getElementsByTagName("head")[0];

  for (var i = 0; i < 25; ++i) {
    var s = document.createElementNS("http://www.w3.org/1999/xhtml", 'style');
    s.style.display = "none";
    myStylesheetHolder.appendChild(s);
    stylesheets.push(s);
  }
}
</script>

</head>
<body>

<p><q>Foo</q></p>

<p id="p2"><q id="q2">0</q></p>

<script type="text/javascript">
  document.body.offsetWidth;
  boom1();
</script>


</body>
```

Expected Results

The results of this test should match the results as seen in the reference test that is located at http://test.csswg.org/suites/css2.1/20101210/html4/first-letter-dynamic-002-ref.htm .

Actual Results

The text is "0" instead of the expected <1>0</1>.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the **inherit** keyword does not inherit from a style that has been dynamically changed.

This is discussed in section 2.1.19 "Section 6.2.1, The 'inherit' value".

3.1.31 CSS 2.1 Test: first-line-floats-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/first-line-floats-002.htm

The test case states:

```
<style type="text/css">
      div { color: red }
      div:first-line { color: green }
    </style>
  </head>
  <body>
    <div><span><span style="float: left">This should be green</span></span></div>


</body>
```

Expected results

The text "This should be green" should be green.

Actual results

The text "This should be green" is red.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because elements contained within a parent of a **:first-line** pseudo-element incorrectly inherit from the parent element instead of the **:first-line** pseudo-element.

This is discussed in section 2.1.16 "Section 5.12.11, The :first-line pseudo-element".

3.1.32 CSS 2.1 Test: first-line-inherit-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/first-line-inherit-002.htm

The test case states:

```
<style type="text/css">
      div { background: green; }
      div:first-line { background-color: red; }
      span.one { background: inherit; }
      span.two { background-color: inherit; }
    </style>
  </head>
  <body>
    <div><span class="one">One</span><span class="two">Two</span></div>

</body>
```

Expected results

There should be no red.

Actual results

The background color of the two **span** elements is red.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because elements contained within a parent of a **:first-line** pseudo-element incorrectly inherit, when the **inherit** keyword is used, from the **:first-line** pseudo-element instead of the parent element.

This is discussed in section 2.1.16 "Section 5.12.11, The :first-line pseudo-element".

3.1.33 CSS 2.1 Test: first-line-inherit-003.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/first-line-inherit-003.htm

The test case states:

```
<style type="text/css">
      div, p { background: green; }
      div:first-line, p:first-line { background-color: red; }
      span.one { background: inherit; }
      span.two { background-color: inherit; }
    </style>
  </head>
  <body>
    <div><p><span class="one">One</span><span class="two">Two</span></p></div>

</body>
```

Expected Results

The results should match the reference test from
http://test.csswg.org/suites/css2.1/20101210/html4/first-line-inherit-003-ref.htm

Actual Results

The results do not match the reference test.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because elements contained within a parent of a **:first-line** pseudo-element incorrectly inherit, when the **inherit** keyword is used, from the **:first-line** pseudo-element instead of the parent element.

This is discussed in section 2.1.16 "Section 5.12.11, The :first-line pseudo-element".

3.1.34 CSS 2.1 Test: first-line-pseudo-013.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/first-line-pseudo-013.htm

The test case states:

```
<style type="text/css">
  .ahem { display: inline; font: 1em/1 Ahem, sans-serif; background: red; color: white; }
  p { margin: 0.2em; }
  .control, .test { font: 4em/1 Ahem; color: green; }
  .first-line, .test:first-line { background: red; vertical-align: top; }
  .inner { font-size: 1.25em; vertical-align: bottom; }
```

```
  </style>
 </head>
 <body>
  <div class="ahem">Ahem_font_required_for_this_test.</div>
  <p>There should be two unbroken lines of green below.</p>
  <p class="control"><span class="first-line">X<span
class="inner">&Eacute;</span>X</span></p>
  <p class="test">X<span class="inner">&Eacute;</span>X</p>
 </body>
```

Expected results

There should be two unbroken lines of green.

Actual results

The second green line is broken with a red rectangle where the acute accent (`´`) character is.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the É (`É`) character does not align properly when **vertical-align** is set to anything other than `baseline`.

This is discussed in section 2.1.54 "Section 10.8, Line height calculations: the 'line-height' and 'vertical-align' properties".

3.1.35 CSS 2.1 Test: first-line-pseudo-016.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/first-line-pseudo-016.htm

The test case states:

```
<style type="text/css">
  .ahem { display: inline; font: 1em/1 Ahem, sans-serif; background: red; color: white; }
  .control, .test { font: 1em/1 Ahem; color: green; margin: 0 2em; }
  .first-line, .test:first-line { background: red; vertical-align: bottom; }
  .inner { font-size: 5em; vertical-align: top; }
  </style>
 </head>
 <body>
  <div class="ahem">Ahem_font_required_for_this_test.</div>
  <p>There should be two unbroken lines of green below.</p>
  <p class="control">><span class="first-line">X<span class="inner">p</span>X</span></p>
  <p class="test">X<span class="inner">p</span>X</p>

</body>
```

Expected results

There should be two unbroken lines of green.

Actual results

The second green line is broken with a red rectangle where the acute accent (`´`) character is.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the acute accent (`´`) does not properly align unless the **vertical-align** property is set to `baseline`.

This is discussed in section 2.1.54 "Section 10.8 Line height calculations: the 'line-height' and 'vertical-align' properties"

3.1.36 CSS 2.1 Test: first-page-selectors-003.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/first-page-selectors-003.htm

The test case states:

```
<style type="text/css">
    @page:first {
      margin-top: 50%;
    }
    @page:left {
      margin-left: 50%;
    }
    @page:right {
      margin: 0;
    }
    html {
      page-break-before: left;
    }
  </style>
 </head>
 <body>
   <p class="import">When printed the top left corner of this box must be in
     the exact center of this page.</p>
 </body>
```

Expected Results

The text "When printed the top left corner of this box must be in the exact center of this page" should be in the center of the first page.

Actual Results

The text "When printed the top left corner of this box must be in the exact center of this page" is not in the center of the first page.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test fails because the test assumes that the page is to be matched by **@page:first**.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2010Nov/0121.html .

3.1.37 CSS 2.1 Test: first-page-selectors-004.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/first-page-selectors-004.htm

The test case states:

```
<style type="text/css">
    @page:first {
      margin-top: 50%;
    }
    @page:right {
      margin-left: 50%;
    }
    @page:left {
      margin: 0;
    }
    html {
      page-break-before: right;
    }
  </style>
 </head>
 <body>
   <p class="import">When printed the top left corner of this box must be in
     the exact center of this page.</p>
 </body>
```

Expected Results

The text "When printed the top left corner of this box must be in the exact center of this page" should be in the center of the first page.

Actual Results

The text "When printed the top left corner of this box must be in the exact center of this page" is not in the center of the first page.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test fails because the test assumes that the page is to be matched by **@page:first**.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2010Nov/0121.html

3.1.38 CSS 2.1 Test: floats-wrap-bfc-006.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/floats-wrap-bfc-006.htm

The test case states:

```
<style type="text/css">

  body { font-size: 16px; }

  table { margin: 0; border-spacing: 0; }
  caption, td, th { padding: 0; vertical-align: top; text-align: left; }

  .capref { background: yellow; }
```

```
  .tabref { background: purple; }

  </style>
</head>
<body>

<table width="300" style="background: aqua"><tbody><tr><td>
    <div style="float:left; clear:left; background:blue; width:150px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:145px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:140px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:135px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:130px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:125px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:120px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:115px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:110px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:105px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:100px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:95px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:90px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:85px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:80px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:75px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:70px; height:1px"></div>

    <div style="float:right; height: 30px; width: 100px; margin-right: 130px;"
class="capref">Caption</div>

    <div style="float:left; clear:left; background:blue; width:65px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:60px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:55px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:50px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:45px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:40px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:35px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:30px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:25px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:20px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:15px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:10px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:5px; height:1px"></div>

    <div style="float:right; clear: right; height: 30px; width: 230px;"
class="tabref">Cell</div>

</td></tr></tbody></table>

<table width="300" style="background: aqua"><tbody><tr><td>
    <div style="float:left; clear:left; background:blue; width:150px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:145px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:140px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:135px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:130px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:125px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:120px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:115px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:110px; height:1px"></div>

    <div style="float:right; height: 30px; width: 190px;" class="capref">Caption</div>
```

```
    <div style="float:left; clear:left; background:blue; width:105px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:100px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:95px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:90px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:85px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:80px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:75px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:70px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:65px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:60px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:55px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:50px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:45px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:40px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:35px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:30px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:25px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:20px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:15px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:10px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:5px; height:1px"></div>

    <div style="float:right; clear: right; height: 30px; width: 100px; margin-right: 90px;"
class="tabref">Cell</div>

</td></tr></tbody></table>

<table width="300" style="background: aqua"><tbody><tr><td>
    <div style="float:left; clear:left; background:blue; width:150px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:145px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:140px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:135px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:130px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:125px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:120px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:115px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:110px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:105px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:100px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:95px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:90px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:85px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:80px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:75px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:70px; height:1px"></div>

    <div style="float:right; clear: right; height: 30px; width: 227px;margin-right:3px;"
class="tabref">Cell</div>

    <div style="float:left; clear:left; background:blue; width:65px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:60px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:55px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:50px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:45px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:40px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:35px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:30px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:25px; height:1px"></div>
```

```
    <div style="float:left; clear:left; background:blue; width:20px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:15px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:10px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:5px; height:1px"></div>

    <div style="float:right; clear: right; height: 30px; width: 100px;margin-right:130px;"
class="capref">Caption</div>
</td></tr></tbody></table>

<table width="300" style="background: aqua"><tbody><tr><td>
    <div style="float:left; clear:left; background:blue; width:150px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:145px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:140px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:135px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:130px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:125px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:120px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:115px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:110px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:105px; height:1px"></div>

    <div style="float:right; clear: right; height: 30px; width: 100px; margin-right:95px;"
class="tabref">Cell</div>

    <div style="float:left; clear:left; background:blue; width:100px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:95px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:90px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:85px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:80px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:75px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:70px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:65px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:60px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:55px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:50px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:45px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:40px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:35px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:30px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:25px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:20px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:15px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:10px; height:1px"></div>
    <div style="float:left; clear:left; background:blue; width:5px; height:1px"></div>

    <div style="float:right; clear: right; height: 30px; width: 192px; margin-right:3px;"
class="capref">Caption</div>
</td></tr></tbody></table>



</body>
```

Expected Results

The results should match the reference test that is located at
http://test.csswg.org/suites/css2.1/20101210/html4/floats-wrap-bfc-006-ref.htm

Actual Results

The results do not match the reference test.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because the width and height of table boxes of table captions have no effect on the width and height of table boxes.

This is discussed in section 2.2.57 "Tables in the visual formatting model".

3.1.39 CSS 2.1 Test: list-style-position-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/list-style-position-001.htm

The test case states:

```
<style type="text/css">
  #test{
  background:red;
  display:list-item;
  font-size:85px;
  margin:50px;
  }
  #test div{
  background:lime;
  overflow:auto;
  }
  </style>
 </head>

 <body>
  <p>To pass, there <strong>must</strong> be a bullet (filled-in circle) visible which
<strong>should</strong> appear alongside the green bar to the left, and there <strong>must
not</strong> not be any red in this page.</p>
  <div id="test">
   <div> </div>
  </div>
 </body>
```

Expected results

There should be a visible bullet (filled-in circle) which should appear alongside the green bar to the left, and there should not be any red in this page.

Actual results

There is a bullet next to a red bar that is drawn above a green bar.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the test expects that the non-breaking space ( ) is not to be considered as the first text run.

3.1.40 CSS 2.1 Test: list-style-position-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/list-style-position-002.htm

The test case states:

```
<style type="text/css">
  #test{
  background:red;
  display:list-item;
  font-size:85px;
  margin:50px;
  }
  #test div.descendant{
  background:lime;
  display: block;
  overflow:auto;
  }
  </style>
 </head>
 <body>
  <p>To pass, there <strong>must</strong> be a bullet (filled-in circle) visible which
<strong>should</strong> appear alongside the green bar to the left, and there <strong>must
not</strong> not be any red in this page.</p>
  <div id="test">
   <div><div class="descendant"> </div></div>
  </div>
 </body>
```

Expected results

To pass, there must be a bullet (filled-in circle) visible which should appear alongside the green bar to the left, and there must not be any red in this page.

Actual results

There is a bullet next to a red bar that is drawn above a green bar.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the test expects that the non-breaking space ( ) is not to be considered as the first text run.

3.1.41 CSS 2.1 Test: list-style-position-010.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/list-style-position-010.htm

The test case states:

```
<style type="text/css">
  #test{
  background:silver;
  color:blue;
```

```
  display:list-item;
  font-size:85px;
  margin:100px;
  }
  #test:before{
  color:yellow;
  content:'T';
  display:list-item;
  list-style-position:inside;
  }
  </style>
 </head>
 <body>
  <p>To pass, there <strong>must</strong> be a blue bullet (filled-in circle) to the left
outside edge of a grey box. Also, there <strong>must</strong> be a yellow bullet to the left
inside edge of the grey box, with a yellow letter to the right of the yellow bullet, and
there <strong>must</strong> be a blue letter below the yellow bullet, within the grey
box.</p>
  <div id="test">
   T
  </div>
 </body>
```

Expected results

To pass, there must be a blue bullet (filled-in circle) to the left outside edge of a grey box. Also, there must be a yellow bullet to the left inside edge of the grey box, with a yellow letter to the right of the yellow bullet, and there must be a blue letter below the yellow bullet, within the grey box.

Actual results

There is no yellow bullet to the left inside edge of the grey box.

The test case fails because the `list-item` value of the **display** property has no effect on generated content.

This is discussed in section 2.1.36 "The 'display' property" and also in section 2.1.65 "List: the 'list-style-type', 'list-style-image, 'list-style-position' and 'list-style' properties".

3.1.42 CSS 2.1 Test: list-style-position-011.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/list-style-position-011.htm

The test case states:

```
<style type="text/css">
  #test{
  background:silver;
  color:blue;
  display:list-item;
  font-size:85px;
  list-style-position:inside;
  margin:100px;
  }
  #test:before{
```

```
  color:yellow;
  content:'T';
  display:list-item;
  list-style-position:outside;
  }
  </style>
 </head>
 <body>
  <p>To pass, there <strong>must</strong> be a blue bullet (filled-in circle) to the inside
left edge of a grey box, below which <strong>must</strong> be a yellow letter, with a yellow
bullet to the left (positioned outside of the grey box) of the yellow letter. Below the
yellow letter, there <strong>must</strong> be a blue letter.</p>
  <div id="test">
   T
  </div>
 </body>
```

Expected results

To pass, there must be a blue bullet (filled-in circle) to the inside left edge of a grey box, below which must be a yellow letter, with a yellow bullet to the left (positioned outside of the grey box) of the yellow letter. Below the yellow letter, there must be a blue letter.

Actual results

There is no yellow bullet to the left (positioned outside of the grey box) of the yellow letter.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the `list-item` value of the **display** property has no effect on generated content.

This is discussed in section 2.1.36 "The 'display' property" and also in section 2.1.65 "List: the 'list-style-type', 'list-style-image, 'list-style-position' and 'list-style' properties".

3.1.43 CSS 2.1 Test: list-style-position-012.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/list-style-position-012.htm

The test case states:

```
<style type="text/css">
  #test{
  background:silver;
  color:blue;
  display:list-item;
  font-size:85px;
  list-style-position:inside;
  margin:100px;
  }
  #test:before{
  color:yellow;
  content:'T';
  display:list-item;
  }
```

```
  </style>
 </head>
 <body>
  <p>To pass, there <strong>must</strong> be a blue bullet (filled-in circle) to the inside
left edge of a grey box, below which must be a yellow bullet and a yellow letter to the right
of that yellow bullet. Below the yellow bullet, there <strong>must</strong> be a blue
letter.</p>
  <div id="test">
   T
  </div>
 </body>
```

Expected results

To pass, there must be a blue bullet (filled-in circle) to the inside left edge of a grey box, below which must be a yellow bullet and a yellow letter to the right of that yellow bullet. Below the yellow bullet, there must be a blue letter.

Actual results

There are no yellow bullets.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the `list-item` value of the **display** property has no effect on generated content.

This is discussed in section 2.1.36 "The 'display' property" and also in section 2.1.65 "List: the 'list-style-type', 'list-style-image, 'list-style-position' and 'list-style' properties".

3.1.44 CSS 2.1 Test: list-style-position-013.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/list-style-position-013.htm

The test case states:

```
<style type="text/css">
  #test{
  background:silver;
  color:blue;
  display:list-item;
  font-size:85px;
  list-style-position:outside;
  margin:100px;
  }
  #test:before{
  color:yellow;
  content:'T';
  display:list-item;
  }
  </style>
 </head>
 <body>
  <p>To pass, there <strong>must</strong> be <em>either</em> a blue <em>or</em> yellow bullet
(filled-in circle) to the outside left edge of a grey box, with a yellow letter to the right
```

```
of that bullet. There <strong>must</strong> also be a blue letter below the yellow
letter.</p>
  <div id="test">
   T
  </div>
 </body>
```

Expected results

To pass, there must be either a blue or yellow bullet (filled-in circle) to the outside left edge of a grey box, with a yellow letter to the right of that bullet. There must also be a blue letter below the yellow letter.

Actual results

The blue letter is not below the yellow letter.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the `list-item` value of the **display** property has no effect on generated content.

This is discussed in section 2.1.36 "The 'display' property" and also in section 2.1.65 "List: the 'list-style-type', 'list-style-image, 'list-style-position' and 'list-style' properties".

3.1.45 CSS 2.1 Test: list-style-position-014.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/list-style-position-014.htm

The test case states:

```
<style type="text/css">
  #test{
  background:silver;
  color:blue;
  display:list-item;
  font-size:85px;
  margin:100px;
  }
  #test:before{
  color:yellow;
  content:'T';
  display:list-item;
  float:left;
  list-style-position:inside;
  }
  </style>
 </head>
 <body>
  <p>To pass, there <strong>must</strong> be blue bullet (filled-in circle) to the outside
left edge of a grey box. Inside the grey box, there <strong>must</strong> be a yellow bullet
to the left of a yellow letter. There <strong>must</strong> also be a blue letter to the
right of the yellow letter.</p>
  <div id="test">
   T
  </div>
```

```
</body>
```

Expected Results

To pass, there must be blue bullet (filled-in circle) to the outside left edge of a grey box. Inside the grey box, there must be a yellow bullet to the left of a yellow letter. There must also be a blue letter to the right of the yellow letter.

Actual Results

There is no yellow bullet.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the `list-item` value of the **display** property has no effect on generated content.

This is discussed in section 2.1.36 "The 'display' property" and also in section 2.1.65 "List: the 'list-style-type', 'list-style-image, 'list-style-position' and 'list-style' properties".

3.1.46 CSS 2.1 Test: list-style-position-015.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/list-style-position-015.htm

The test case states:

```
<style type="text/css">
  #test{
  background:silver;
  color:blue;
  display:list-item;
  font-size:85px;
  list-style-position:inside;
  margin:100px;
  }
  #test:before{
  color:yellow;
  content:'T';
  display:list-item;
  float:left;
  list-style-position:outside;
  }
  </style>
 </head>
 <body>
  <p>To pass, there <strong>must</strong> a yellow bullet (filled-in circle) to the left
outside edge of a grey box. Inside the grey box, there <strong>must</strong> be a yellow
letter to the left of a blue bullet, and a blue letter to the right of the blue bullet.</p>
  <div id="test">
   T
  </div>
 </body>
```

Expected Results

To pass, there must a yellow bullet (filled-in circle) to the left outside edge of a grey box. Inside the grey box, there must be a yellow letter to the left of a blue bullet, and a blue letter to the right of the blue bullet.

Actual Results

There is no yellow bullet.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the `list-item` value of the **display** property has no effect on generated content.

This is discussed in section 2.1.36 "The 'display' property" and also in section 2.1.65 "List: the 'list-style-type', 'list-style-image, 'list-style-position' and 'list-style' properties".

3.1.47 CSS 2.1 Test: list-style-position-016.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/list-style-position-016.htm

The test case states:

```
<style type="text/css">
  #test{
  background:silver;
  color:blue;
  display:list-item;
  font-size:85px;
  list-style-position:inside;
  margin:100px;
  }
  #test:before{
  color:yellow;
  content:'T';
  display:list-item;
  float:left;
  }
  </style>
 </head>
 <body>
  <p>To pass, there <strong>must</strong> a yellow bullet (filled-in circle) to the inside
left edge of a grey box, and a yellow letter to the right of the yellow bullet. There
<strong>must</strong> also be a blue bullet to the right of the yellow letter, and a blue
letter to the right of the blue bullet.</p>
  <div id="test">
   T
  </div>
 </body>
```

Expected Results

To pass, there must a yellow bullet (filled-in circle) to the inside left edge of a grey box, and a yellow letter to the right of the yellow bullet. There must also be a blue bullet to the right of the yellow letter, and a blue letter to the right of the blue bullet.

Actual Results.

There is no yellow bullet.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the `list-item` value of the **display** property has no effect on generated content.

This is discussed in section 2.1.36 "The 'display' property" and also in section 2.1.65 "List: the 'list-style-type', 'list-style-image, 'list-style-position' and 'list-style' properties".

3.1.48 CSS 2.1 Test: ltr-span-only.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/ltr-span-only.htm

The test case states:

```
<style type="text/css">
      .r { direction: rtl; }
      .l { direction: ltr; }
      span { border: 2px solid; padding: 0 10px 0 5px; margin: 0 60px 0 30px; }
   </style>
 </head>
 <body>
   <div class="r"><span class="l">One<br>Two</span></div>
 </body>
```

Expected Results

The results of this test should resemble the results from the reference test found at http://test.csswg.org/suites/css2.1/20101210/html4/right-ltr-ref.htm .

Actual Results

The results do not match the results of the reference test.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because alignment of child inline elements is incorrect when the parent and child are specified with different directions.

This is discussed in section 2.1.33 "9.10 Text direction:the 'direction'and 'unicode-bidi'properties".

3.1.49 CSS 2.1 Test: ltr-span-only-ib.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/ltr-span-only.htm

The test case states:

```
<style type="text/css">
      .r { direction: rtl; }
      .l { direction: ltr; }
      span { border: 2px solid; padding: 0 10px 0 5px; margin: 0 60px 0 30px; }
  </style>
```

```
</head>
<body>
  <div class="r"><span class="l">One<div></div>Two</span></div>
</body>
```

Expected Results

The results of this test should resemble the results from the reference test found at http://test.csswg.org/suites/css2.1/20101210/html4/right-ltr-ref.htm .

Actual Results

The results do not match the results of the reference test.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because alignment of child inline elements is incorrect when the parent and child are specified with different directions.

This is discussed in section 2.1.33 "9.10 Text direction:the 'direction'and 'unicode-bidi'properties".

3.1.50 CSS 2.1 Test: margin-collapse-164.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/margin-collapse-164.htm

The test case states:

```
<style type="text/css">
 .outer { margin: 1em; background: red; height: 4.5em; }
 .border { border: solid; width: 10em; }
 .box { margin: 0; background: yellow; }
 .float { margin: 0; width: 5em; height: 1.5em; background: orange; float: right; }
 .clear { margin-top: 3em; height: 1.5em; background: aqua; clear: both; }
 .control { border: solid; width: 10em; background: yellow; margin: 1em; }
 .control .a { margin: 0 0 0 auto; width: 5em; height: 1.5em; background: orange; }
 .control .b { margin-top: 1.5em; height: 1.5em; background: aqua; }
</style>
</head>
<body>
 <p>The following two boxes should be identical, with no red present.</p>
 <div class="outer border">
  <div class="box">
   <div class="float">TEST</div>
   <div class="clear">TEST</div>
  </div>
 </div>
 <div class="control">
  <div class="a">TEST</div>
  <div class="b">TEST</div>
 </div>

</body>
```

Expected Results

The two boxes in the test should be identical.

Actual Results

The two boxes in the test are not identical.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the test assumes a certain margin collapsing behavior that does not match the following statement from the current spec:

"Computing the clearance of an element on which 'clear' is set is done by first determining the hypothetical position of the element's top border edge within its parent block. This position is where the actual top border edge would have been if the element had a non-zero bottom border and its 'clear' property had been 'none'"

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2010Dec/0191.html .

3.1.51 CSS 2.1 Test: margin-collapse-clear-005.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/margin-collapse-clear-005.htm

The test case states:

```
<style type="text/css">
    div.target1 { position: absolute; left: -15px; height: 50px; width: 0; border-left: 10px
solid yellow; top: 0px; }
    div.target2 { position: absolute; left: -15px; height: 20px; width: 0; border-left: 5px
solid aqua; border-right: 5px solid silver; top: 50px; }
    div.target3 { position: absolute; left: -15px; height: 50px; width: 0; border-left: 5px
solid orange; border-right: 5px solid silver; top: 100px; }
    div.target4 { position: absolute; left: -15px; height: 30px; width: 0; border-left: 10px
solid silver; top: 70px; }
    div.container { width: 150px; position: relative; margin-left: 20px; border: solid thin;
}
    div.box1 { height: 50px; background-color: yellow; }
    div.parentof2and3 { background-color: silver; padding-right: 10px; }
    div.box2 { background-color: aqua; float: left; width: 20px; height: 20px; }
    div.box3 { clear: left; margin-top: 50px; height: 50px; background-color: orange; }
  </style>
 </head>
 <body>
  <p>The coloured bars on the left should match the coloured boxes in the black box.</p>
  <div class="container">
    <div class="target1"></div>
    <div class="target2"></div>
    <div class="target3"></div>
    <div class="target4"></div>
    <div class="box1">A</div>
    <div class="parentof2and3">
      <div class="box2">B</div>
      <div class="box3">C</div>
    </div>
  </div>
 </body>
```

Expected Results

The colored bars on the left should match the colored boxes in the black box.

Actual Results

The colored bars on the left do not match the colored boxes in the black box.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the test assumes a certain margin collapsing behavior that does not match the following statement from the current spec:

"Computing the clearance of an element on which 'clear' is set is done by first determining the hypothetical position of the element's top border edge within its parent block. This position is where the actual top border edge would have been if the element had a non-zero bottom border and its 'clear' property had been 'none'"

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2010Dec/0191.html

3.1.52 CSS 2.1 Test: margin-collapse-clear-011.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/margin-collapse-clear-011.htm

The test case states:

```
<style type="text/css">
    div.target1 { position: absolute; left: -15px; height: 50px; width: 0; border-left: 10px
solid yellow; top: 0px; }
    div.target2 { position: absolute; left: -15px; height: 20px; width: 0; border-left: 5px
solid aqua; border-right: 5px solid silver; top: 50px; }
    div.target3 { position: absolute; left: -15px; height: 50px; width: 0; border-left: 5px
solid orange; border-right: 5px solid silver; top: 100px; }
    div.target4 { position: absolute; left: -15px; height: 30px; width: 0; border-left: 10px
solid silver; top: 70px; }
    div.container { width: 150px; position: relative; margin-left: 20px; border: solid thin;
}
    div.box1 { height: 50px; background-color: yellow; }
    div.parentof2and3 { background-color: silver; padding-right: 10px; }
    div.box2 { background-color: aqua; float: left; width: 20px; height: 20px; }
    div.box3 { overflow: hidden; clear: left; margin-top: 50px; height: 50px; background-
color: orange; }
  </style>
 </head>
 <body>
  <p>The coloured bars on the left should match the coloured boxes in the black box.</p>
  <div class="container">
    <div class="target1"></div>
    <div class="target2"></div>
    <div class="target3"></div>
    <div class="target4"></div>
    <div class="box1">A</div>
    <div class="parentof2and3">
      <div class="box2">B</div>
      <div class="box3">C</div>
    </div>
```

```
  </div>
 </body>
```

Expected Results

The colored bars on the left should match the colored boxes in the black box.

Actual Results

The colored bars on the left do not match the colored boxes in the black box.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the test assumes a certain margin collapsing behavior that does not match the following statement from the current spec:

"Computing the clearance of an element on which 'clear' is set is done by first determining the hypothetical position of the element's top border edge within its parent block. This position is where the actual top border edge would have been if the element had a non-zero bottom border and its 'clear' property had been 'none'"

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2010Dec/0191.html

3.1.53 CSS 2.1 Test: margin-em-inherit-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/margin-em-inherit-001.htm

The test case states:

```
<style type="text/css">
  body {margin: 8px;}

  p
  {
  font: 16px/20px serif;
  margin: 1em 0em;
  }

  div#grand-parent
  {
  width: 600px;
  }

  div#parent
  {
  background-color: lime;
  border: white solid 6px;
  /* Such border prevents margin collapsing between #parent's vertical margins and #child's
vertical margins */
  font-size: 28px;
  margin: 2em 3em 1em 4em; /* 56px 84px 28px 112px */
  }

  div#child
```

```
  {
  font-size: 40px;
  margin: inherit;
  /* What is inherited is a computed length value: so it is 56px 84px 28px 112px and not 80px
120px 40px 160px */
  }

  div#abs-pos-overlapping-lime
  {
  left: 238px;
  position: absolute;
  top: 174px;
  }


  /*
       8px (body's margin-left)
   + 112px (#parent's margin-left)
   +   6px (#parent's border-left)
   + 112px (#child's margin-left)
  ==================
     238px
  */

  /*
      16px (max(8px, 16px): body's margin-top collapses with p's margin-top)
   +  20px (first line)
   +  20px (second line)
   +  56px (max(16px, 56px): p's margin-bottom collapses with #parent's margin-top)
   +   6px (#parent's border-top)
   +  56px (#child's margin-top)
  ==================
     174px
  */
  </style>

 </head>

 <body>

  <p>Test passes if there is a filled bright<br>
  green rectangle and if there is no red.</p>

  <div id="grand-parent">
    <div id="parent">
      <div id="child"><img src="support/red_box.png" alt="Image download support must be
enabled"></div>
    </div>
  </div>

  <div id="abs-pos-overlapping-lime"><img src="support/lime_color.png" alt="Image download
support must be enabled"></div>

 </body>
```

Expected Results

The test passes if there is a filled bright green rectangle and if there is no red.

Actual Results

There are two red rectangles inside of the bright green rectangle.

It is clear that IE9 fails by comparing the expected and actual results.

The test case fails because the **inherit** keyword is not inheriting from the computed value of the parent element.

This is discussed in section 2.1.19 "Section 6.2.1, The 'inherit' value".

3.1.54 CSS 2.1 Test: margin-left-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/margin-left-001.htm

The test case states:

```
<style type="text/css">
  hr, div#control
  {
  background-color: black;
  border-style: none;
  height: 1em;
  margin-left: 0px;
  width: 33%;
  }
  </style>

 </head>

 <body>

  <p>The 2 black stripes below should be positioned on the left</p>

  <hr>

  <div id="control"></div>

 </body>
```

Expected Results

The two black stripes should be positioned to the left.

Actual Results

The first stripe is not positioned to the left.

It is clear that IE9 fails by comparing the expected and actual results.

The test case fails because it is testing an assumption of how **HR** elements are handled.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2011Jan/0043.html .

3.1.55 CSS 2.1 Test: orphans-004b.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/orphans-004b.htm

```
The test case states:

<style type="text/css">
  @page {
    margin: 7%;
  }
  html, body {
    height:100%;
    line-height:1;
  }
  * {
    margin:0;
    padding:0;
  }
  div {
    height: 100%;
    margin-bottom: -3em;
  }
  p {
    width: 1em;
    orphans: 4.01;
  }
</style>
</head>
<body>
  <div>This test requires two pages. The letters 'a', 'b' and 'c' should appear on this page.
The letters 'd' and 'e' should appear on the next page.</div>
  <p>a b c d e</p>
</body>
```

Expected results

This test requires two pages. When viewing the content on paged media, the letters 'a', 'b', and 'c' should appear on the first page. The letters 'd' and 'e' should appear on the second page of the paged media.

Actual results

When viewing the content on paged media, the letters 'a' and 'b' appear on the first page. The letters 'c', 'd' and 'e' appear on the second page.

It is clear that IE9 fails by comparing the expected and actual results.

The test case fails because negative values for the **margin-bottom** property are not rendered correctly on paged media.

Content outside the page box is discarded when negative margins are used.

This is discussed in section 2.1.26 " Section 8.3, Margin properties: 'margin-top', 'margin-right', 'margin-bottom', 'margin-left', and 'margin'".

3.1.56 CSS 2.1 Test: orphans-004c.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/orphans-004c.htm

The test case states:

```
<style type="text/css">
  @page {
    margin: 7%;
  }
  html, body {
    height:100%;
    line-height:1;
  }
  * {
    margin:0;
    padding:0;
  }
  div {
    height: 100%;
    margin-bottom: -3em;
  }
  p {
    width: 1em;
    orphans: -4;
  }
</style>
</head>
<body>
  <div>This test requires two pages. The letters 'a', 'b' and 'c' should appear on this page.
The letters 'd' and 'e' should appear on the next page.</div>
  <p>a b c d e</p>
</body>
```

Expected Results

This test requires two pages. When viewing the content on paged media, the letters 'a', 'b', and 'c' should appear on the first page. The letters 'd' and 'e' should appear on the second page of the paged media.

Actual Results

When viewing the content on paged media, the letters 'a' and 'b' appear on the first page. The letters 'c', 'd' and 'e' appear on the second page.

It is clear that IE9 fails by comparing the expected and actual results.

The test case fails because negative values for the **margin-bottom** property are not rendered correctly on paged media.

Content outside the page box is discarded when negative margins are used.

This is discussed in section 2.1.26 " Section 8.3, Margin properties: 'margin-top', 'margin-right', 'margin-bottom', 'margin-left', and 'margin'".

3.1.57 CSS 2.1 Test: padding-em-inherit-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/padding-em-inherit-001.htm

The test case states:

```
<style type="text/css">
  body {margin: 8px;}

  p
  {
  font: 16px/20px serif;
  margin: 1em 0em;
  }

  div#grand-parent
  {
  font-size: 32px;
  width: 400px;
  }

  div#parent
  {
  background-color: lime;
  font-size: 24px;
  padding: 2em 3em 1em 4em; /* 48px 72px 24px 96px */
  }

  div#child
  {
  font-size: 40px;
  padding: inherit;
  /* What is inherited is a computed length value: so it is 48px 72px 24px 96px and not 80px
120px 40px 160px */
  }

  div#abs-pos-overlapping-lime
  {
  left: 200px;
  position: absolute;
  top: 168px;
  }

  /*
       8px (body's margin-left)
   +  96px (#parent's padding-left)
   +  96px (#child's padding-left)
  ==================
     200px
  */

  /*
  max(8px, 16px) (margin collapsing between body's margin-top and p's margin-top)
  +   20px (first line)
  +   20px (second line)
  +   16px (p's margin-bottom)
  +   48px (#parent's padding-top)
```

```
  +   48px (#child's padding-top)
  ==================
     168px
  */
  </style>

 </head>

 <body>

  <p>Test passes if there is a filled<br>
  bright green rectangle and no red.</p>

  <div id="grand-parent">
    <div id="parent">
      <div id="child"><img src="support/red_box.png" alt="Image download support must be
enabled"></div>
    </div>
  </div>

  <div id="abs-pos-overlapping-lime"><img src="support/lime_color.png" alt="Image download
support must be enabled"></div>

 </body>
```

Expected Results

The test passes if there is a filled bright green rectangle and no red.

Actual Results

There are two red rectangles inside of the bright green rectangle.

It is clear that IE9 fails by comparing the expected and actual results.

The test case fails because the **inherit** keyword is not inheriting from the computed value of the parent element.

This is discussed in section 2.1.19 "Section 6.2.1, The 'inherit' value".

3.1.58 CSS 2.1 Test: page-box-000.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/page-box-000.htm

```
The test case states:

<style type="text/css">

  @page {
    margin: -1em;
  }
  html {
    height: 100%;
    background: #dff;
  }
```

```
  div {
    padding: 3em;
  }

  </style>
 </head>
 <body>
   <div>
   This test produces one page on paged media.  When viewed in a print preview or printed on
a printer supporting "full bleed"
   (also known as "edge-to-edge" or "borderless" printing), the entire surface of the medium
is a pale cyan.  There is no white showing around the edges.
   </div>
 </body>
```

Expected results

This test produces one page on paged media. When viewed in a print preview or printed on a printer supporting "full bleed" (also known as "edge-to-edge" or "borderless" printing), the entire surface of the medium is a pale cyan. There is no white showing around the edges.

Actual results

The entire surface of the medium is not pale cyan.

It is clear that IE9 fails by comparing the expected and actual results.

The test case fails because negative values for the **margin** property are not rendered correctly on paged media.

Content outside the page box is discarded when negative margins are used.

This is discussed in section 2.1.26 " Section 8.3, Margin properties: 'margin-top', 'margin-right', 'margin-bottom', 'margin-left', and 'margin'".

3.1.59 CSS 2.1 Test: page-break-after-009.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/page-break-after-009.htm

```
The test case states:
<style type="text/css">
  @page {margin: 7%;}
  html, body {
    height: 100%;
    line-height: 1;
  }
  * {
    margin: 0;
    padding: 0;
  }
  div {
    height: 100%;
    margin-bottom: -1em;
    page-break-after: avoid;
  }
```

```
    p {
      width: 1em;
      page-break-after: always;
    }
    p#one {
      widows: 3;
      orphans: 1;
    }
    div#draggedDown {margin-bottom: -2em;}
    p#two {
      widows: 3;
      orphans: 3;
    }
  </style>
  </head>
  <body>
    <div>The letters a, b, and c follow. The 'a' must appear on this page.</div>
    <p id="one">a b c</p>
    <div id="draggedDown">The letters a, b, and c follow and should appear on this page.</div>
    <p id="two">a b c</p>
  </body>
```

Expected results

When viewed in a print preview or printed on a printer, the letter ‘a’ is supposed to be on the first page. The letters ‘a’, ‘b’, and ‘c’ are supposed to be on the second page of the paged media.

Actual results

Four pages are presented in print preview. The letter ‘a’ is not on the first page. The letters ‘a’, ‘b’, and ‘c’ are not on the same page as the text "The letters a, b, and c follow and should appear on this page."

It is clear that IE9 fails by comparing the expected and actual results.

The test case fails because negative values for the **margin-bottom** property are not rendered correctly on paged media.

Content outside the page box is discarded when negative margins are used.

This is discussed in section 2.1.26 " Section 8.3, Margin properties: 'margin-top', 'margin-right', 'margin-bottom', 'margin-left', and 'margin'".

3.1.60 CSS 2.1 Test: page-break-before-009.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/page-break-before-009.htm

```
  The test case states:
  <style type="text/css">
    @page {margin: 7%;}
    html, body {
      height: 100%;
      line-height: 1;
    }
    * {
```

```
      margin: 0;
      padding: 0;
    }
    div {
      height: 100%;
      margin-bottom: -1em;
    }
    p {
      width: 1em;
      page-break-before: avoid;
      page-break-after: always;
    }
    p#one {
      widows: 1;
      orphans: 1;
    }
    div#draggedDown {margin-bottom: -2em;}
    p#two {
      widows: 3;
      orphans: 3;
    }
  </style>
  </head>
  <body>
    <div>The letters a, b, and c follow. The 'a' must appear on this page.</div>
    <p id="one">a b c</p>
    <div id="draggedDown">The letters a, b, and c follow and should appear on this page.</div>
    <p id="two">a b c</p>
  </body>
```

Expected results

When viewed in a print preview or printed on a printer, the letter ‘a’ is supposed to be on the first page. The letters ‘a’, ‘b’, and ‘c’ are supposed to be on the second page of the paged media.

Actual results

Four pages are presented in print preview. The letter ‘a’ is not on the first page. The letters ‘a’, ‘b’, and ‘c’ are not on the same page as the text "The letters a, b, and c follow and should appear on this page."

It is clear that IE9 fails by comparing the expected and actual results.

The test case fails because negative values for the **margin-bottom** property are not rendered correctly on paged media.

Content outside the page box is discarded when negative margins are used.

This is discussed in section 2.1.26 " Section 8.3, Margin properties: 'margin-top', 'margin-right', 'margin-bottom', 'margin-left', and 'margin'".

3.1.61 CSS 2.1 Test: page-break-before-010.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/page-break-before-010.htm

The test case states:

```
<style type="text/css">
  html, body {
    height:100%;
    line-height:1;
  }
  div {
    page-break-before: auto;
    widows: 0;
    orphans: 0;
  }
  div#first {height: 50%;}
  div#second {
    height: 50%;
    margin-bottom: -4em;
  }
  div#third {width: 0;}
</style>
</head>
<body>
  <div id="first">This test requires two pages. The next paragraph appears on the same page
as this one.</div>
  <div id="second">The 'a', 'b', 'c' and 'd' that follow are displayed either near the bottom
of this page or at the top of the next. The subsequent 'e' and 'f' appear on the next
page.</div>
  <div id="third">a b c d e f</div>
</body>
```

Expected Results

This test requires two pages. When viewing the content on paged media, the letters 'a', 'b', 'c', and 'd' are supposed to be visible. The letters 'e' and 'f' are supposed to be on the second page.

Actual Results

The letter ‘c’ is not visible and only half of the letter ‘d’ can be seen.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because negative values for the **margin-bottom** property are not rendered correctly on paged media.

Content outside the page box is discarded when negative margins are used.

This is discussed in section 2.1.26 " Section 8.3, Margin properties: 'margin-top', 'margin-right', 'margin-bottom', 'margin-left', and 'margin'".

3.1.62 CSS 2.1 Test: page-break-before-020.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/page-break-before-020.htm

The test case states:

```
<style type="text/css">
```

```
    #floated {
      float: right;
      page-break-before: always;
      width: 50%;
    }

  </style>
  </head>
  <body>
    <div>
    <p>This test produces two pages when displayed on paged media.  This paragraph is the only
content on page one.</p>
    <div id="floated">This paragraph is on page two and is entirely on the right side of the
page.</div>
    </div>
  </body>
```

Expected Results

This test produces two pages when displayed on paged media. There should be only one paragraph on the first page. On the second page, there should be a paragraph that is on the right side of the page.

Actual Results

There is only one page when displayed on paged media.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because of the attempt to apply **page-break before: always** to a floated element.

The [CSS-Level2-2009] specification section 13.3.1, *Page break properties: 'page-break-before', 'page-break-after', 'page-break-inside'*, states:

"User Agents must apply these properties to block-level elements in the normal flow of the root element."

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2011Jan/0044.html .

3.1.63 CSS 2.1 Test: page-break-inside-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/page-break-inside-002.htm

The test case states:

```
<style type="text/css">
  * {
    margin: 0;
    padding: 0;
    orphans: 1;
    widows: 1;
  }
```

```
    html, body {
      height:100%;
      line-height: 1;
      font-size: 16pt;
    }
    div.spacers {
      height: 50%;
    }
    div#backUp {margin-top: -2em;}
    div.break {
      width: 0;
    }
    span {page-break-inside: avoid;}

  </style>
  </head>
  <body>
    <div class="spacers"> </div>
    <div class="spacers" id="backUp">The text below should break onto two pages, with only the
  letter 'c' appearing on the second page.</div>
    <div class="break">
      <span>a b c</span>
    </div>
  </body>
```

Expected results

When viewing the content on paged media, the text should break onto two pages with only the letter 'c' appearing on the second page.

Actual results

When viewing the content on paged media, the letters ‘b’ and ‘c’ appear on the second page.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because negative values for the **margin-top** property are not rendered correctly on paged media.

Content outside the page box is discarded when negative margins are used.

This is discussed in section 2.1.26 " Section 8.3, Margin properties: 'margin-top', 'margin-right', 'margin-bottom', 'margin-left', and 'margin'".

3.1.64 CSS 2.1 Test: page-break-inside-004.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/page-break-inside-004.htm

The test case states:

```
  <style type="text/css">
    * {
      margin: 0;
      padding: 0;
      orphans: 1;
```

```
    widows: 1;
  }
  html, body {
    height:100%;
    line-height: 1;
  }
  div.spacers {
    height: 50%;
  }
  div#takeTwo {page-break-before: always}
  div.backUp {margin-top: -4em;}
  div#break2 {
    page-break-inside: avoid;
    page-break-inside: auto;
  }
  .breaker {
    width: 0;
    font-weight: bold;
    color: blue;
  }
</style>
</head>
<body>
  <div class="spacers">
    <p>This test produces four pages of output. The blue numbers must correspond to the page
number they appear on.</p>
  </div>
  <div class="spacers backUp"></div>
  <div class="breaker" id="break1">1 1 1 1 2 2 2 2</div>

  <div class="spacers backup" id="takeTwo"></div>
  <div class="spacers backUp"></div>
  <div class="breaker" id="break2">3 3 3 3 4 4 4 4</div>
</body>
```

Expected Results

When viewed on paged media, the test produces four pages of output. The blue numbers must correspond to the page number that they appear on.

Actual Results

Some numbers do not appear on correct page. A number "1" appears on the second page and a number "3" appears on the fourth page.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because negative values for the **margin** property are not rendered correctly on paged media.

Content outside the page box is discarded when negative margins are used.

This is discussed in section 2.1.26 " Section 8.3, Margin properties: 'margin-top', 'margin-right', 'margin-bottom', 'margin-left', and 'margin'".

3.1.65 CSS 2.1 Test: page-break-inside-005.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/page-break-inside-005.htm

The test case states:

```
<style type="text/css">
    /* Most permissible breaking possible */
    * { widows: 1; orphans: 1; widows: 0; orphans: 0; }

    /* Leave 2.5 lines at bottom to play with, independent of page size. */
    html, body {
      height: 100%;
      line-height: 1;
    }
    .spacer1 {
      height: 35%;
    }
    .spacer2 {
      height: 15%;
      margin-top: -2.5em;
    }

    .avoid {
      page-break-inside: avoid;
      height: 200%;
    }
    .test div {
      white-space: pre;
      /* Make test text more visible */
      color: blue;
      font-weight: bold;
    }
</style>
</head>
<body>
  <div class="avoid">
   <div class="spacer1">This test requires 2 pages. Lines A and B must appear
     on the first page, lines C and D on the second.</div>
   <div class="spacer2"></div>
   <div class="test">
<div>    Page 1 Line A
    Page 1 Line B
    Page 2 Line C</div>
<div>    Page 2 Line D</div>
   </div>
  </div>
</body>
```

Expected Results

When viewed on paged media, this test has two pages of output. Lines A and B must appear on the first page. Lines C and D must appear on the second page.

Actual Results

There are three pages of output and all of the lines appear on the third page.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because negative values for the **margin** property are not rendered correctly on paged media.

Content outside the page box is discarded when negative margins are used.

This is discussed in section 2.1.26 " Section 8.3, Margin properties: 'margin-top', 'margin-right', 'margin-bottom', 'margin-left', and 'margin'".

3.1.66 CSS 2.1 Test: page-container-004.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/page-container-004.htm

The test case states:

```
<style type="text/css">
    html {
      width: 50%;
      float: right;
      border: medium solid purple;
}
    div {
      page-break-before: always;
}
  </style>
 </head>
 <body>
  <p>This test produces two pages of output.</p>
  <p>The text on this page has a left, top, and right purple border which should be entirely
on the right
  half of the page.  (There should be no bottom border.)</p>
  <div>The text on this page has a left, bottom, and right purple border which should be
entirely on the right
  half of the page.  (There should be no top border.)</div>
 </body>
```

Expected Results

When viewed on paged media, the test produces two pages of output. The text on the first page should have left, top, and right purple borders that should be entirely on the right half of the page. (There should be no bottom border.)

The text on second page should have left, bottom, and right purple borders that should be entirely on the right half of the page. (There should be no top border.)

Actual Results

The content is not on the right half of the page.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because the pass conditions are not clear enough.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2010Dec/0200.html .

3.1.67 CSS 2.1 Test: page-grammar-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/page-grammar-001.htm

The test case states:

```
<style type="text/css">
    @page {
      margin: 10%;    /* This makes the header big enough to hold the file name when printed
on 4x6 in media. */
    }
    @page :right {
      margin-left: 50%;
    }
    @page:left{
      margin-right: 50%;
    }
    body {
      page-break-before: right;
    }
    p {
      page-break-after: always;
    }
    span {
      color: gray;
    }

   </style>
 </head>
 <body>
  <p>This test produces two pages of output on paged media.  This paragraph must be entirely
on the right side of the page.
    <span>Dummy text dummy text dummy text dummy text dummy text dummy text dummy text dummy
text dummy text dummy text dummy text dummy text dummy text dummy text dummy text dummy
text.</span>
  </p>
  <p>This paragraph must be on a new page and is entirely on the left side of the page.
    <span>Dummy text dummy text dummy text dummy text dummy text dummy text dummy text dummy
text dummy text dummy text dummy text dummy text dummy text dummy text dummy text dummy
text.</span>
  </p>
 </body>
```

Expected Results

This test produces two pages of output on paged media. The first paragraph must be entirely on the right side of the page. The second paragraph must be on a new page and it should be entirely on the left side of the page.

Actual Results

The test produces three pages of output on paged media.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because the test needs to be simplified.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2011Jan/0046.html .

3.1.68 CSS 2.1 Test: page-grammar-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/page-grammar-002.htm

The test case states:

```
<style type="text/css">

    @page {
  margin: 10%;    /* This makes the header big enough to hold the file name when printed on
4x6 in media. */
    }
    @page:right{
      margin-left: 50%;
    }
    @page :left {
      margin-right: 50%;
    }
    body {
      page-break-before: right;
    }
    p {
  page-break-after: always;
    }
    span {
  color: gray;
    }

   </style>
 </head>
 <body>
  <p>This test produces two pages of output on paged media.  This paragraph must be entirely
on the right side of the page.
    <span>Dummy text dummy text dummy text dummy text dummy text dummy text dummy text dummy
text dummy text dummy text dummy text dummy text dummy text dummy text dummy text dummy
text.</span>
  </p>
  <p>This paragraph must be entirely on the left side of the page.
    <span>Dummy text dummy text dummy text dummy text dummy text dummy text dummy text dummy
text dummy text dummy text dummy text dummy text dummy text dummy text dummy text dummy
text.</span>
  </p>
 </body>
```

Expected Results

This test produces two pages of output on paged media. The first paragraph must be entirely on the right side of the page. The second paragraph must be on a new page and it should be entirely on the left side of the page.

Actual Results

The test produces three pages of output on paged media.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because the test needs to be simplified.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2011Jan/0046.html

3.1.69 CSS 2.1 Test: page-props-102.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/page-props-102.htm

The test case states

```
<style type="text/css">

    @page :first {
        margin: 7%;
    }
    @page :left {
        margin-left: 50%;
        margin-right: 7%;
    }
    @page :right {
        margin-right: 33%;
        margin-left: 7%;
    }
    div {
        margin-bottom: 2em;
        width: 98%
    }
    .edged {
        border: medium solid blue;
        background: #ececff;
        padding: 1%;
        page-break-after: always;
    }

  .style1 {
    background-color: #ececff;
}

  </style>
 </head>
 <body>
   <div>
   This test produces three pages on paged media.
   </div>
   <div class="edged">
   This page should have typical right and left margins.  This content is completely enclosed
by a blue border and has a pale blue background. A page break follows.
   </div>
   <div class="edged">
   This content should be entirely on the right side of the page (but might instead
   have margins like the first page). It is completely enclosed by a blue border and has a
pale blue background. A page break follows.
   </div>
   <div class="edged">
```

```
    This page should have a wide right margin and narrow left margin (but might
    instead have margins like the first page). This content has a blue border on all sides and
 a pale blue background.
    </div>
  </body>
```

Expected results

When viewed on paged media, the test produces three pages of output. Page margins should be correctly set with the **@page** rule for **:left** and **:right**.

Actual results

Content on the second page is overflows the page boundaries on the right side.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because page margins for **:left** pages is not set correctly on the right side of the page and **:right** pages are not set correctly on the left side of the page.

3.1.70 CSS 2.1 Test: quotes-035.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/quotes-035.htm

The test case states:

```
<style type="text/css">

     .party1 * { display: inline; }
     .party1 .a { quotes: "Isn"        "'"
                          "t"          "FAIL!"
                          "FAIL!"      " i"; }
     .party1 .b { quotes: ""           "FAIL!!"
                          " wonderful" "!!!"
                          " to "       " work"
                          "see "       " [FAIL to]"
                          "C"          "quotes"
                          "S"          " "; }
     .party1 .c { quotes: none; }
     .party1 .d { quotes: "FAIL!"      "FAIL!"
                          "FAIL!"      "FAIL!"
                          ""           ""; }
     .test { margin-left: 2em; }
     .test .no-open:before { content: no-open-quote; }
     .test .open:before { content: open-quote; }
     .test .triple-open:before { content: open-quote open-quote open-quote; }
     .test .no-close:after { content: no-close-quote; }
     .test .triple-no-close:after { content: no-close-quote no-close-quote no-close-quote; }
     .test .close:after { content: close-quote; }
     .test .triple-close:after { content: close-quote close-quote close-quote; }
     .test .no-close-open:before { content: no-close-quote open-quote; }


  </style>
 </head>
```

```
<body>

 <!-- this is the same as the 002.xml version except the <br> and <hr> nodes are <div>s. -->

   <!--                                                Isn't it wonderful to see CSS quotes
work!!!
   --><div class="test c party1"><!--               c 0
    --><div class="a open close"><!-- open          a 1 isn
    --></div><!-- close                             a 0 '
    --><div class="a"><!--                          a 0
     --><div class="c open"><!-- open               c 1
      --><div class="a open"><!-- open              a 2 t
      --></div><!--                                 a 2
     --></div><!--                                  c 2
     --><div class="no-open close"><!--             a 3 [FAIL!]
     --></div><!-- close                            a 2 i
    --></div><!--                                   a 2
    --><div class="no-close-open no-close a"><!--   a 2 [FAIL!] t
    --></div><!-- close                             a 1
    --><div class="d no-open no-close"><!-- open    d 2 [FAIL!]
     --><div class="open close"><!-- open           d 3
      --><div class="open close"><!-- open          d 4
      --></div><!-- close                           d 3
     --></div><!-- close                            d 2
    --></div><!-- close                             d 1 [FAIL!]
    --><div class="b no-close"><!--                 b 1
     --><div class="triple-no-close"></div><!-- close    b 0 [FAIL!!]
     --><div class="triple-open"></div><!-- open x 3     b 3 "", "wonderful ", "to "
     --><div class="triple-open"></div><!-- open x 3     b 6 "see ", "C", "S"
     --><div class="open close"><!-- open           b 7 S
      --><div class="close"><!--                    b 7
       --><div class="no-close"><!--                b 7
        --><div class="close"><!--                  b 7
         --><div class="no-close"><!--              b 7
          --><div class="close"><!--                b 7
          --></div><!-- close                      b 6 " "
         --></div><!-- close                       b 5 [" "]
        --></div><!-- close                        b 4  quotes
       --></div><!-- close                         b 3 [ FAIL to]
      --></div><!-- close                          b 2  work
     --></div><!-- close                           b 1 !!!
    --></div><!-- close                            b 0 [FAIL!!]
   --></div><!--                                    b 0
   -->

</body>
```

Expected results

The quotes counters should count correctly and the text that is shown should be "Isn’t it wonderful to see CSS quotes work!!!".

Actual results

The quotes counters do not count correctly and the text that is shown is "Isn't'IsnFAIL!FAIL! wonderful to wonderful to FAIL!!FAIL!!FAIL!!FAIL!!".

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because the `no-open-quote` and `no-close-quote` values for the **content** property incorrectly change the nesting levels of counters.

This is discussed in section 2.1.60 "Section 12.3.2, Inserting quotes with the 'content' property".

3.1.71 CSS 2.1 Test: quotes-036.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/quotes-036.htm

The test case states:

```
<style type="text/css">

   .party1 * { display: inline; }
   .party1 .a { quotes: "Isn"        "'"
                        "t"          "FAIL!"
                        "FAIL!"      " i"; }
   .party1 .b { quotes: ""           "FAIL!!"
                        " wonderful" "!!!"
                        " to "       " work"
                        "see "       " [FAIL to]"
                        "C"          "quotes"
                        "S"          " "; }
   .party1 .c { quotes: none; }
   .party1 .d { quotes: "FAIL!"      "FAIL!"
                        "FAIL!"      "FAIL!"
                        ""           ""; }
   .test { margin-left: 2em; }
   .test .no-open:before { content: no-open-quote; }
   .test .open:before { content: open-quote; }
   .test .triple-open:before { content: open-quote open-quote open-quote; }
   .test .no-close:after { content: no-close-quote; }
   .test .triple-no-close:after { content: no-close-quote no-close-quote no-close-quote; }
   .test .close:after { content: close-quote; }
   .test .triple-close:after { content: close-quote close-quote close-quote; }
   .test .no-close-open:before { content: no-close-quote open-quote; }

   /* hr br */
   .test hr, .test br { display: inline; margin: 0; padding: 0;
     height: auto; width: auto; border: none; color: inherit;
     background: transparent; }
   .test br:before { content: "" }
   .test br:after { content: "" }

 </style>
</head>
<body>

   <!--                                                Isn't it wonderful to see CSS quotes
work!!!
   --><div class="test c party1"><!--               c 0
    --><div class="a open close"><!-- open          a 1 isn
    --></div><!-- close                             a 0 '
    --><div class="a"><!--                          a 0
     --><div class="c open"><!-- open               c 1
      --><div class="a open"><!-- open              a 2 t
```

```
      --></div><!--                                  a 2
     --></div><!--                                   c 2
     --><div class="no-open close"><!--              a 3 [FAIL!]
     --></div><!-- close                             a 2 i
    --></div><!--                                    a 2
    --><div class="no-close-open no-close a"><!--    a 2 [FAIL!] t
    --></div><!-- close                              a 1
    --><div class="d no-open no-close"><!-- open     d 2 [FAIL!]
     --><div class="open close"><!-- open            d 3
      --><div class="open close"><!-- open           d 4
      --></div><!-- close                            d 3
     --></div><!-- close                             d 2
    --></div><!-- close                              d 1 [FAIL!]
    --><div class="b no-close"><!--                  b 1
     --><br class="triple-no-close"><!-- close     b 0 [FAIL!!]                  <<< EVIL
     --><hr class="triple-open"><!-- open x 3      b 3 "", "wonderful ", "to "   <<< EVIL
     --><br class="triple-open"><!-- open x 3      b 6 "see ", "C", "S"          <<< EVIL
     --><div class="open close"><!-- open           b 7 S
      --><div class="close"><!--                    b 7
       --><div class="no-close"><!--                b 7
        --><div class="close"><!--                  b 7
         --><div class="no-close"><!--              b 7
          --><div class="close"><!--                b 7
          --></div><!-- close                      b 6 " "
         --></div><!-- close                       b 5 [" "]
        --></div><!-- close                        b 4  quotes
       --></div><!-- close                         b 3 [ FAIL to]
      --></div><!-- close                          b 2  work
     --></div><!-- close                           b 1 !!!
    --></div><!-- close                             b 0 [FAIL!!]
   --></div><!--                                    b 0
   -->

</body>
```

Expected results

The quotes counters should count correctly and the text that is shown should be "Isn’t it wonderful to see CSS quotes work!!!".

Actual results

The quotes counters do not count correctly and the text that is shown is "Isn't'IsnFAIL!FAIL! wonderful to wonderful to FAIL!!FAIL!!FAIL!!FAIL!!".

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because the `no-open-quote` and `no-close-quote` values for the **content** property incorrectly change the nesting levels of counters**.**

This is discussed in section 2.1.60 "Section 12.3.2, Inserting quotes with the 'content' property".

3.1.72 CSS 2.1 Test: replaced-intrinsic-003.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/replaced-intrinsic-003.htm

The test case states:

```
<style type="text/css">
   html { background: white; color: navy; }
   body { background: 100px 0 url(support/test-tr.png) no-repeat; }
   div { width: 100px; background: url(support/test-bl.png) bottom left no-repeat; }
   div p { background: url(support/test-tl.png) top left no-repeat; }
   object { display: block; margin: auto; padding-right: 100px; background: url(support/test-
br.png) bottom right no-repeat; }
  </style>
 </head>
 <body>
  <div><p><object data="support/replaced-intrinsic-003.svg" type="image/svg+xml"> FAIL (SVG
not supported) </object></p></div>
  <p>There should be a complete unbroken yin-yang symbol (☯) above.</p>
 </body>
```

Expected results

There should be a complete and unbroken yin-yang symbol (☯).

Actual results

The yin yang symbol is fragmented.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because the images are not resized before positioning; this is when the **SVG** element has an intrinsic ratio.

3.1.73 CSS 2.1 Test: replaced-intrinsic-ratio-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/replaced-intrinsic-ratio-001.htm

The test case states:

```
<style type="text/css">
   body { width: 15em; border: 1px silver dashed; }
   table, td { border-spacing: 0; border-collapse: collapse; padding: 0; }
   p, table { margin: 6em 0; height: 1em; line-height: 1em;}

   /* basic tests for inline and block */
   #img1 { margin-top: -1em; }
   #img2 { display: block; }

   /* shrinkwrapped */
   #p3 { width: 100%; float: left; margin: 0; }
   #t4 { width: 15em; display: table-cell; }
   #t5 { width: 100%; }

   /* controls */
   object { background: red; }
   object, .control { border: 1em blue solid; margin: 0 1em; }

   .control { background: green; }
```

```
    .inst { height: auto; margin: 1em 0; }
   </style>
  </head>
  <body>
   <p class="inst">The following six blue boxes must be of the same width. There must be no
red.</p>
   <p class="control"> </p>
   <p>      
     <!-- sizing is against containing block, not available space -->
     <object id="img1" type="image/svg+xml" data="support/intrinsic-ratio.svg">This test won't
work because you do not have images enabled.</object></p>
   <p><object id="img2" type="image/svg+xml" data="support/intrinsic-ratio.svg">This test
won't work because you do not have images enabled.</object></p>
   <p id="t4"><object id="img4" type="image/svg+xml" data="support/intrinsic-ratio.svg">This
test won't work because you do not have images enabled.</object></p>
   <table id="t5"><tr><td><object id="img5" type="image/svg+xml" data="support/intrinsic-
ratio.svg">This test won't work because you do not have images
enabled.</object></td></tr></table>
   <p id="p3"><object id="img3" type="image/svg+xml" data="support/intrinsic-ratio.svg">This
test won't work because you do not have images enabled.</object></p>
  </body>
```

Expected Results

The six blue boxes must be of the same width. There must be no red.

Actual Results

The first box is not the same width as the other boxes and there is red visible.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because the images are not resized before positioning; this is when the **SVG** element has an intrinsic ratio.

3.1.74 CSS 2.1 Test: rtl-borders-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/rtl-borders-001.htm

The test case states:

```
<style type="text/css">
            div
            {
                width: 0.9in;
            }
            span
            {
                border-left: solid blue;
                border-right: solid orange;
                direction: rtl;
            }
        </style>
    </head>
    <body>
```

```
        <p>Test passes if the first line of "Filler Text" below has an orange border on the
right, and the last line of "Filler Text" has a blue border on the left.</p>
        <div>
            <span>Filler Text Filler Text Filler Text</span>
        </div>
    </body>
```

Expected Results

The test passes if the first line of "Filler Text" below has an orange border on the right, and the last line of "Filler Text" has a blue border on the left.

Actual Results

The first line has a blue border on the left side and the last line has orange border on the right.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because borders are not placed on the correct side when an element has its **direction** property set to `rtl`.

This is discussed in section 2.1.33 "9.10 Text direction:the 'direction'and 'unicode-bidi'properties".

3.1.75 CSS 2.1 Test: rtl-span-only.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/rtl-span-only.htm

The test case states:

```
<style type="text/css">
    .r { direction: rtl; }
    .l { direction: ltr; }
    span { border: 2px solid; padding: 0 10px 0 5px; margin: 0 60px 0 30px; }
  </style>
 </head>
 <body>
   <div><span class="r">One<br>Two</span></div>
 </body>
```

Expected Results

The results of this test should resemble the results from the reference test found at http://test.csswg.org/suites/css2.1/20101210/html4/left-rtl-ref.htm .

Actual Results

The results do not match the results of the reference test.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because alignment of child inline elements is incorrect when the parent and child are specified with different directions.

This is discussed in section 2.1.33 "9.10 Text direction:the 'direction'and 'unicode-bidi'properties".

3.1.76 CSS 2.1 Test: rtl-span-only-ib.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/rtl-span-only-ib.htm

The test case states:

```
<style type="text/css">
      .r { direction: rtl; }
      .l { direction: ltr; }
      span { border: 2px solid; padding: 0 10px 0 5px; margin: 0 60px 0 30px; }
  </style>
 </head>
 <body>
   <div><span class="r">One<div></div>Two</span></div>
 </body>
```

Expected Results

The results of this test should resemble the results from the reference test found at http://test.csswg.org/suites/css2.1/20101210/html4/left-rtl-ref.htm .

Actual Results

The results do not match the results of the reference test.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because alignment of child inline elements is incorrect when the parent and child are specified with different directions.

This is discussed in section 2.1.33 "9.10 Text direction:the 'direction'and 'unicode-bidi'properties".

3.1.77 CSS 2.1 Test: run-in-clear-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/run-in-clear-002.htm

The test case states:

```
<style type="text/css">
    div { display: block; }
    .bold { font-weight: bold; float: left }
    #target { border: 2px solid black; }
    .run-in { display: run-in; }
    .clear { clear: both; }
  </style>
  <script type="text/javascript">
    function flushLayout(elt) {
      elt.offsetWidth; /* Just undefined on non-elements, but that's ok */
      for (var i = 0; i < elt.childNodes.length; ++i) {
        flushLayout(elt.childNodes[i]);
      }
    }
    window.onload = function() {
```

```
      flushLayout(document.documentElement);
      var r = document.getElementById("r");
      r.className = "run-in clear";
    }
  </script>
 </head>
 <body>
   <div class="bold">Run-in header</div>
   <div id="r" class="run-in">Some </div>
   <div>text.</div>
   <div id="target">Start of block.  The run-in header should NOT be inside the
    border around this block; it should be on a line by itself before the line
    containing "Some text".</div>
 </body>
```

Expected results

The run-in header should be on a line by itself before the line containing "Some text".

Actual results

The text "Run-in header" is on the same line as "some text"

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because dynamic setting of the **clear** property on a run-in element is ignored.

This is discussed in section 2.1.44 "Controlling flow next to floats: the 'clear' property"

3.1.78 CSS 2.1 Test: run-in-contains-table-caption-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/run-in-contains-table-caption-001.htm

The test case states:

```
<style type="text/css">
    div { display: block; }
    .run-in { display: run-in; font-weight: bold }
    #target { border: 2px solid black; }
    .run-in > span { display: table-caption }
  </style>
 </head>
 <body>
   <div class="run-in">Run-in <span>header</span></div>
   <div id="target">Start of block.  The run-in header should be inside the border around
this block and there should be no space between the word "header" and the word "Start".</div>
 </body>
```

Expected results

The run-in header should be inside the border around this block and there should be no space between the word "header" and the word "Start".

Actual results

The text "header" is overlapping the text "Start" in this test.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because the width and height of table boxes of table captions have no effect on the width and height of table boxes.

This is discussed in section 2.2.57 "Tables in the visual formatting model".

3.1.79 CSS 2.1 Test: table-anonymous-objects-003.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-anonymous-objects-003.htm

The test case states:

```
<body>
<p>There should be no red below, except for antialiasing issues.</p>
<div style="position: relative; font-size: 2em;">
<div style="position: relative; z-index: 1; color: red; padding: 1px;">

    <span style="display:table">
      <span style="display: table-cell">
        Cell 1
      </span>
      <script type="text/javascript">document.body.offsetWidth</script>
      <span style="display: table-cell">
        Cell 2
      </span>
    </span>
  </div>
<div style="position: absolute; z-index: 2; top: 0; color: green; padding: 1px;">

    <table cellspacing="0" cellpadding="0" style="border: none; padding: 0; margin: 0">
      <tr>
        <td>Cell 1</td>
        <td>Cell 2</td>
      </tr>
    </table>
  </div>
</div>
</body>
```

Expected results

There should be no red text, except for antialiasing issues.

Actual results

The text "Cell 2" is drawn in red.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test fails because any content of an element that has its **display** property set to `none` is not properly collected into the correct cells and extra anonymous tables are created.

This is discussed in section 2.2.55 "Section 17.2, The CSS table model".

3.1.80 CSS 2.1 Test: table-anonymous-objects-004.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-anonymous-objects-004.htm

The test case states:

```
<body>
<p>There should be no red below, except for antialiasing issues.</p>
<div style="position: relative; font-size: 2em;">
<div style="position: absolute; z-index: 2; top: 0; color: green; padding: 1px;">

    <span style="display:table">
      <span style="display: table-cell">
        Cell 1
      </span>
      <script type="text/javascript">document.body.offsetWidth</script>
      <span style="display: table-cell">
        Cell 2
      </span>
    </span>
  </div>
<div style="position: relative; z-index: 1; color: red; padding: 1px;">

    <table cellspacing="0" cellpadding="0" style="border: none; padding: 0; margin: 0">
      <tr>
        <td>Cell 1</td>
        <td>Cell 2</td>
      </tr>
    </table>
  </div>
</div>
</body>
```

Expected Results

There should be no red visible in the test, except for antialiasing issues.

Actual Results

The text "Cell 2" is in red.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test fails because any content of an element that has its **display** property set to `none` is not properly collected into the correct cells and extra anonymous tables are created.

This is discussed in section 2.2.55 "Section 17.2, The CSS table model".

3.1.81 CSS 2.1 Test: table-anonymous-objects-187.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-anonymous-objects-187.htm

The test case states:

```
<head>
  <title>CSS Test: Auto-imported from Gecko test white-space-17.html</title>
  <link rel="author" title="Boris Zbarsky" href="mailto:bzbarsky@mit.edu">
  <link rel="help" href="http://www.w3.org/TR/CSS21/tables.html#anonymous-boxes">
  <meta name="flags" content="dom">

    <style type="text/css">
      #t:after { content: "d" }
    </style>
  </head>
<body>
<p>There should be no red below, except for antialiasing issues.</p>
<div style="position: relative; font-size: 2em;">
<div style="position: relative; z-index: 1; color: red; padding: 1px;">

    <span id="t">
      a
      <span style="display: table-cell">b</span>
      <script type="text/javascript">document.body.offsetWidth</script>
      <span style="display: table-cell">c</span>
    </span>
  </div>
<div style="position: absolute; z-index: 2; top: 0; color: green; padding: 1px;">

    a bc d
  </div>
</div>
</body>
```

Expected Results

There should be no red visible in the test, except for antialiasing issues.

Actual Results

The text "Cell 2" is in red.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test fails because any content of an element that has its **display** property set to `none` is not properly collected into the correct cells and extra anonymous tables are created.

This is discussed in section 2.2.55 "Section 17.2, The CSS table model".

3.1.82 CSS 2.1 Test: table-anonymous-objects-188.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-anonymous-objects-188.htm

The test case states:

```
<head>
  <title>CSS Test: Auto-imported from Gecko test white-space-17.html</title>
  <link rel="author" title="Boris Zbarsky" href="mailto:bzbarsky@mit.edu">
  <link rel="help" href="http://www.w3.org/TR/CSS21/tables.html#anonymous-boxes">
  <meta name="flags" content="dom">
```

```
    <style type="text/css">
      #t:after { content: "d" }
    </style>
  </head>
<body>
<p>There should be no red below, except for antialiasing issues.</p>
<div style="position: relative; font-size: 2em;">
<div style="position: absolute; z-index: 2; top: 0; color: green; padding: 1px;">

    <span id="t">
      a
      <span style="display: table-cell">b</span>
      <script type="text/javascript">document.body.offsetWidth</script>
      <span style="display: table-cell">c</span>
    </span>
  </div>
<div style="position: relative; z-index: 1; color: red; padding: 1px;">

    a bc d
  </div>
</div>
</body>
```

Expected Results

There should be no red visible in the test, except for antialiasing issues.

Actual Results

The text "Cell 2" is in red.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test fails because any content of an element that has its **display** property set to `none` is not properly collected into the correct cells and extra anonymous tables are created.

This is discussed in section 2.2.55 "Section 17.2, The CSS table model".

3.1.83 CSS 2.1 Test: table-anonymous-objects-195.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-anonymous-objects-195.htm

The test case states:

```
<style type="text/css">
      #t:before { content: "a" }
    </style>
  </head>
<body>
<p>There should be no red below, except for antialiasing issues.</p>
<div style="position: relative; font-size: 2em;">
<div style="position: relative; z-index: 1; color: red; padding: 1px;">

    <span id="t">
```

```
      <span style="display: table-cell">b</span>
      <script type="text/javascript">document.body.offsetWidth</script>
      <span style="display: table-cell">c</span>
      d
    </span>
  </div>
<div style="position: absolute; z-index: 2; top: 0; color: green; padding: 1px;">

    a bc d
  </div>
</div>
</body>
```

Expected Results

There should be no red visible in the test.

Actual Results

The letters ‘c’ and ‘d’ can be seen in red.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test fails because any content of an element that has its **display** property set to `none` is not properly collected into the correct cells and extra anonymous tables are created.

This is discussed in section 2.2.55 "Section 17.2, The CSS table model".

3.1.84 CSS 2.1 Test: table-anonymous-objects-196.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-anonymous-objects-196.htm

The test case states:

```
<style type="text/css">
      #t:before { content: "a" }
    </style>
  </head>
<body>
<p>There should be no red below, except for antialiasing issues.</p>
<div style="position: relative; font-size: 2em;">
<div style="position: absolute; z-index: 2; top: 0; color: green; padding: 1px;">

    <span id="t">
      <span style="display: table-cell">b</span>
      <script type="text/javascript">document.body.offsetWidth</script>
      <span style="display: table-cell">c</span>
      d
    </span>
  </div>
<div style="position: relative; z-index: 1; color: red; padding: 1px;">

    a bc d
  </div>
</div>
```

```
</body>
```

Expected Results

There should be no red visible in the test.

Actual Results

The letters ‘c’ and ‘d’ can be seen in red.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test fails because any content of an element that has its **display** property set to `none` is not properly collected into the correct cells and extra anonymous tables are created.

This is discussed in section 2.2.55 "Section 17.2, The CSS table model".

3.1.85 CSS 2.1 Test: table-backgrounds-bc-colgroup-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bc-colgroup-001.htm

The test case states:

```
<style type="text/css">

  html, body { margin: 0; padding: 0; border: 0; font-size: 16px; }
  body { padding: 15px; }

  table {
    margin: 0 3px 2px 4px; /* zero top to work around collapsing bug */
    border: transparent solid;
    border-width: 4px 2px 8px 6px; /* collapsed */
    padding: 3px 7px 8px 6px; /* ignored */
    border-collapse: collapse;
  }

  td {
    border: transparent solid;
    border-width: 2px 0 4px 2px; /* collapsed */
    padding: 1px 2px 4px 3px;
    empty-cells: show;
  }

  div { height: 10px; width: 50px; }

  table.color colgroup.t { background-color: aqua; }

  table.imagetl colgroup.t, table.imagebr colgroup.t {
    background-image: url(support/repeatable-diagonal-gradient-with-ticks.png);
  }

  table.imagetl colgroup.t { background-position: top left; /* default */ }
  table.imagebr colgroup.t { background-position: bottom right; /* default */ }

  </style>
```

```
</head>
<body>

<table class="color">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody class="t">

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td><td
class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
</table>

<table class="imagetl">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
  <tbody class="t">
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td>
<td class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
  <tbody>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
</table>

<table class="imagebr">
```

```
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody class="t">

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td><td
class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
</table>



</body>
```

Expected results

The cells of the first table are supposed to have an aqua background. The background of the cells in the second table is supposed to be filled with diagonal gradient with a tick at the top left corner. The background of the cells in the third table is supposed to be filled with diagonal gradient with a tick at the bottom right corner.

Reference images may be found at http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bs-colgroup-001-ref.htm.

Actual results

The gradients in the second and third table do not match the reference images.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because positioning of the background is not based on the **table** element but the **colgroup** element itself.

3.1.86 CSS 2.1 Test: table-backgrounds-bc-column-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bc-column-001.htm

The test case states:

```
<style type="text/css">

  html, body { margin: 0; padding: 0; border: 0; font-size: 16px; }
  body { padding: 15px; }

  table {
    margin: 0 3px 2px 4px; /* zero top to work around collapsing bug */
    border: transparent solid;
    border-width: 4px 2px 8px 6px; /* collapsed */
    padding: 3px 7px 8px 6px; /* ignored */
    border-collapse: collapse;
  }

  td {
    border: transparent solid;
    border-width: 2px 0 4px 2px; /* collapsed */
    padding: 1px 2px 4px 3px;
    empty-cells: show;
  }

  div { height: 10px; width: 50px; }

  table.color col.t { background-color: aqua; }

  table.imagetl col.t, table.imagebr col.t {
    background-image: url(support/repeatable-diagonal-gradient-with-ticks.png);
  }

  table.imagetl col.t { background-position: top left; /* default */ }
  table.imagebr col.t { background-position: bottom right; /* default */ }

  </style>
</head>
<body>

<table class="color">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
  <tbody class="t">
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td>
<td class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
  <tbody>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
```

```
</td><td><div></div></td></tr>
  </tbody>
</table>

<table class="imagetl">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
  <tbody class="t">
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td>
<td class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
  <tbody>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
</table>

<table class="imagebr">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
  <tbody class="t">

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td><td
class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
  <tbody>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
</table>
```

```
</body>
```

Expected results

The results of the test should be similar to the reference images at http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bs-column-001-ref.htm.

Actual results

The results of the test do not appear to be similar to the reference images because the background gradient of the last table is different.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because positioning of the background is not based on the **table** element but the **colgroup** element itself.

3.1.87 CSS 2.1 Test: table-backgrounds-bc-row-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bc-row-001.htm

The test case states:

```
<style type="text/css">

  html, body { margin: 0; padding: 0; border: 0; font-size: 16px; }
  body { padding: 15px; }

  table {
    margin: 0 3px 2px 4px; /* zero top to work around collapsing bug */
    border: transparent solid;
    border-width: 4px 2px 8px 6px; /* collapsed */
    padding: 3px 7px 8px 6px; /* ignored */
    border-collapse: collapse;
  }

  td {
    border: transparent solid;
    border-width: 2px 0 4px 2px; /* collapsed */
    padding: 1px 2px 4px 3px;
    empty-cells: show;
  }

  div { height: 10px; width: 50px; }

  table.color tr.t { background-color: aqua; }

  table.imagetl tr.t, table.imagebr tr.t {
    background-image: url(support/repeatable-diagonal-gradient-with-ticks.png);
  }

  table.imagetl tr.t { background-position: top left; /* default */ }
  table.imagebr tr.t { background-position: bottom right; /* default */ }

  </style>
```

```
</head>
<body>

<table class="color">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
  <tbody class="t">
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td>
<td class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
  <tbody>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
</table>

<table class="imagetl">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
  <tbody class="t">
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td>
<td class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
  <tbody>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
</table>

<table class="imagebr">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
```

```
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>
        <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div>
</td><td><div></div></td></tr>
  </tbody>
  <tbody class="t">

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td><td
class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
</table>



</body>
```

Expected results

The results of the test should be similar to the reference images at http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bc-row-001-ref.htm.

Actual Results

The results of the test do not appear to be similar to the reference images because the background gradient of the last table is different.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because positioning of the background is not based on the **table** element but the **row** element itself.

3.1.88 CSS 2.1 Test: table-backgrounds-bc-rowgroup-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bc-rowgroup-001.htm

The test case states:

```
<style type="text/css">

  html, body { margin: 0; padding: 0; border: 0; font-size: 16px; }
  body { padding: 15px; }

  table {
```

```
    margin: 0 3px 2px 4px; /* zero top to work around collapsing bug */
    border: transparent solid;
    border-width: 4px 2px 8px 6px; /* collapsed */
    padding: 3px 7px 8px 6px; /* ignored */
    border-collapse: collapse;
  }

  td {
    border: transparent solid;
    border-width: 2px 0 4px 2px; /* collapsed */
    padding: 1px 2px 4px 3px;
    empty-cells: show;
  }

  div { height: 10px; width: 50px; }

  table.color tbody.t { background-color: aqua; }

  table.imagetl tbody.t, table.imagebr tbody.t {
    background-image: url(support/repeatable-diagonal-gradient-with-ticks.png);
  }

  table.imagetl tbody.t { background-position: top left; /* default */ }
  table.imagebr tbody.t { background-position: bottom right; /* default */ }

  </style>
</head>
<body>

<table class="color">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody class="t">

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td><td
class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
</table>

<table class="imagetl">
```

```
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody class="t">

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td><td
class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
</table>

<table class="imagebr">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody class="t">

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td><td
class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
</table>
```

```
</body>
```

Expected results

The results of the test should be similar to the reference images at http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bc-rowgroup-001-ref.htm.

Actual Results

The results of the test do not appear to be similar to the reference images because the background gradient of the last table is different.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because positioning of the background is not based on the **table** element but the **rowgroup** element itself.

3.1.89 CSS 2.1 Test: table-backgrounds-bs-colgroup-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bs-colgroup-001.htm

The test case states:

```
<style type="text/css">

  html, body { margin: 0; padding: 0; border: 0; font-size: 16px; }
  body { padding: 15px; }

  table {
    margin: 0 3px 2px 4px; /* zero top to work around collapsing bug */
    border: transparent solid;
    border-width: 4px 2px 7px 3px;
    padding: 3px 7px 8px 6px;
    border-collapse: separate;
    border-spacing: 2px 3px;
  }

  td {
    border: transparent solid;
    border-width: 2px 1px 4px 3px;
    padding: 1px 2px 4px 3px;
    empty-cells: show;
  }

  div { height: 10px; width: 50px; }

  table.color colgroup.t { background-color: aqua; }

  table.imagetl colgroup.t, table.imagebr colgroup.t {
    background-image: url(support/repeatable-diagonal-gradient-with-ticks.png);
  }

  table.imagetl colgroup.t { background-position: top left; /* default */ }
  table.imagebr colgroup.t { background-position: bottom right; /* default */ }
```

```
    </style>
  </head>
  <body>

  <table class="color">
    <colgroup><col></colgroup>
    <colgroup class="t">
          <col>
          <col class="t">
          <col>
    </colgroup>
    <colgroup><col></colgroup>
    <tbody>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
    <tbody class="t">

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
          <tr class="t"><td><div></div></td><td><div></div></td><td
  class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
    <tbody>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
  </table>

  <table class="imagetl">
    <colgroup><col></colgroup>
    <colgroup class="t">
          <col>
          <col class="t">
          <col>
    </colgroup>
    <colgroup><col></colgroup>
    <tbody>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
    <tbody class="t">

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
          <tr class="t"><td><div></div></td><td><div></div></td><td
  class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
    <tbody>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
```

```
    </tbody>
  </table>

  <table class="imagebr">
    <colgroup><col></colgroup>
    <colgroup class="t">
          <col>
          <col class="t">
          <col>
    </colgroup>
    <colgroup><col></colgroup>
    <tbody>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
    <tbody class="t">

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
          <tr class="t"><td><div></div></td><td><div></div></td><td
  class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
    <tbody>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
  </table>



  </body>
```

Expected results

The results of the test should be similar to the reference images at http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bs-colgroup-001-ref.htm.

Actual Results

The results of the test do not appear to be similar to the reference images because the background gradient of the last table is different.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because positioning of the background is not based on the **table** element but the **colgroup** element itself.

3.1.90 CSS 2.1 Test: table-backgrounds-bs-column-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bs-column-001.htm

The test case states:

```
<style type="text/css">

  html, body { margin: 0; padding: 0; border: 0; font-size: 16px; }
  body { padding: 15px; }

  table {
    margin: 0 3px 2px 4px; /* zero top to work around collapsing bug */
    border: transparent solid;
    border-width: 4px 2px 7px 3px;
    padding: 3px 7px 8px 6px;
    border-collapse: separate;
    border-spacing: 2px 3px;
  }

  td {
    border: transparent solid;
    border-width: 2px 1px 4px 3px;
    padding: 1px 2px 4px 3px;
    empty-cells: show;
  }

  div { height: 10px; width: 50px; }

  table.color col.t { background-color: aqua; }

  table.imagetl col.t, table.imagebr col.t {
    background-image: url(support/repeatable-diagonal-gradient-with-ticks.png);
  }

  table.imagetl col.t { background-position: top left; /* default */ }
  table.imagebr col.t { background-position: bottom right; /* default */ }

  </style>
</head>
<body>

<table class="color">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody class="t">

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td><td
class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
```

```
    </tbody>
    <tbody>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
  </table>

  <table class="imagetl">
    <colgroup><col></colgroup>
    <colgroup class="t">
          <col>
          <col class="t">
          <col>
    </colgroup>
    <colgroup><col></colgroup>
    <tbody>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
    <tbody class="t">

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
          <tr class="t"><td><div></div></td><td><div></div></td><td
  class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
    <tbody>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
  </table>

  <table class="imagebr">
    <colgroup><col></colgroup>
    <colgroup class="t">
          <col>
          <col class="t">
          <col>
    </colgroup>
    <colgroup><col></colgroup>
    <tbody>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
    <tbody class="t">

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
          <tr class="t"><td><div></div></td><td><div></div></td><td
  class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
```

```
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
</table>



</body>
```

Expected results

The results of the test should be similar to the reference images at http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bs-column-001-ref.htm.

Actual Results

The results of the test do not appear to be similar to the reference images because the background gradient of the last table is different.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because positioning of the background is not based on the **table** element but the **col** element itself.

3.1.91 CSS 2.1 Test: table-backgrounds-bs-row-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bs-row-001.htm

The test case states:

```
<style type="text/css">

  html, body { margin: 0; padding: 0; border: 0; font-size: 16px; }
  body { padding: 15px; }

  table {
    margin: 0 3px 2px 4px; /* zero top to work around collapsing bug */
    border: transparent solid;
    border-width: 4px 2px 7px 3px;
    padding: 3px 7px 8px 6px;
    border-collapse: separate;
    border-spacing: 2px 3px;
  }

  td {
    border: transparent solid;
    border-width: 2px 1px 4px 3px;
    padding: 1px 2px 4px 3px;
    empty-cells: show;
  }

  div { height: 10px; width: 50px; }
```

```
    table.color tr.t { background-color: aqua; }

    table.imagetl tr.t, table.imagebr tr.t {
      background-image: url(support/repeatable-diagonal-gradient-with-ticks.png);
    }

    table.imagetl tr.t { background-position: top left; /* default */ }
    table.imagebr tr.t { background-position: bottom right; /* default */ }

    </style>
  </head>
  <body>

  <table class="color">
    <colgroup><col></colgroup>
    <colgroup class="t">
          <col>
          <col class="t">
          <col>
    </colgroup>
    <colgroup><col></colgroup>
    <tbody>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
    <tbody class="t">

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
          <tr class="t"><td><div></div></td><td><div></div></td><td
  class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
    <tbody>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
  </table>

  <table class="imagetl">
    <colgroup><col></colgroup>
    <colgroup class="t">
          <col>
          <col class="t">
          <col>
    </colgroup>
    <colgroup><col></colgroup>
    <tbody>

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
    </tbody>
    <tbody class="t">

  <tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
  </div></td></tr>
```

```
        <tr class="t"><td><div></div></td><td><div></div></td><td
class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
</table>

<table class="imagebr">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody class="t">

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
        <tr class="t">><td><div></div></td><td><div></div></td><td
class="t">><div></div></td><td><div></div></td><td><div></div></td></tr>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
</table>



</body>
```

Expected results

The results of the test should be similar to the reference images at http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bs-row-001-ref.htm.

Actual Results

The results of the test do not appear to be similar to the reference images because the background gradient of the last table is different.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because positioning of the background is not based on the **table** element but the **row** element itself.

3.1.92 CSS 2.1 Test: table-backgrounds-bs-row-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bs-row-002.htm

The test case states:

```
<style type="text/css">
  #test{
  display:table;
  width:500px;
  }
  .table-row{
  background:url(support/swatch-red.png) repeat-y 50% 0;
  display:table-row;
  }
  .table-cell{
  display:table-cell;
  height:100px;
  }
  .border-left{
  border-left:8px solid green;
  }
  .border-right{
  border-right:8px solid green;
  }
  </style>
 </head>
 <body>
  <p>To pass, there <strong>must not</strong> be any red below.</p>
  <div id="test">
   <div class="table-row">
    <div class="table-cell border-right"></div>
    <div class="table-cell border-left"></div>
   </div>
  </div>
 </body>
```

Expected results

The results of the test should be similar to the reference images at http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bs-row-002-ref.htm.

Actual Results

The results of the test do not appear to be similar to the reference images because the background gradient of the last table is different.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because positioning of the background is not based on the **table** element but the **row** element itself.

3.1.93 CSS 2.1 Test: table-backgrounds-bs-rowgroup-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bs-rowgroup-001.htm

The test case states:

```
<style type="text/css">

  html, body { margin: 0; padding: 0; border: 0; font-size: 16px; }
  body { padding: 15px; }

  table {
    margin: 0 3px 2px 4px; /* zero top to work around collapsing bug */
    border: transparent solid;
    border-width: 4px 2px 7px 3px;
    padding: 3px 7px 8px 6px;
    border-collapse: separate;
    border-spacing: 2px 3px;
  }

  td {
    border: transparent solid;
    border-width: 2px 1px 4px 3px;
    padding: 1px 2px 4px 3px;
    empty-cells: show;
  }

  div { height: 10px; width: 50px; }

  table.color tbody.t { background-color: aqua; }

  table.imagetl tbody.t, table.imagebr tbody.t {
    background-image: url(support/repeatable-diagonal-gradient-with-ticks.png);
  }

  table.imagetl tbody.t { background-position: top left; /* default */ }
  table.imagebr tbody.t { background-position: bottom right; /* default */ }

  </style>
</head>
<body>

<table class="color">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody class="t">
```

```
<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td><td
class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
</table>

<table class="imagetl">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody class="t">

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td><td
class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
</table>

<table class="imagebr">
  <colgroup><col></colgroup>
  <colgroup class="t">
        <col>
        <col class="t">
        <col>
  </colgroup>
  <colgroup><col></colgroup>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody class="t">
```

```
<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
        <tr class="t"><td><div></div></td><td><div></div></td><td
class="t"><div></div></td><td><div></div></td><td><div></div></td></tr>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
  <tbody>

<tr><td><div></div></td><td><div></div></td><td><div></div></td><td><div></div></td><td><div>
</div></td></tr>
  </tbody>
</table>



</body>
```

Expected results

The results of the test should be similar to the reference images at http://test.csswg.org/suites/css2.1/20101210/html4/table-backgrounds-bs-rowgroup-001-ref.htm.

Actual Results

The results of the test do not appear to be similar to the reference images because the background gradient of the last table is different.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because positioning of the background is not based on the **table** element but the **rowgroup** element itself.

3.1.94 CSS 2.1 Test: table-caption-003.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/table-caption-003.htm

The test case states:

```
<style type="text/css">
   .table { display: table; width: 100%; }
   .caption { display: table-caption; }
   .cell { display: table-cell; }
   .green { color: green; }
  </style>
 </head>
 <body>
  <p>There should be two green lines below.</p>
  <div class="table">
   <div class="green cell"> 2. This line sho</div>
   <div class="green caption"> 1. This line should be green. </div>
   <div class="green cell">uld be green. </div>
  </div>
```

```
</body>
```

Expected Results

There should be two lines of green text.

Actual Results

There are three lines of green text.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because the width and height of table boxes of table captions have no effect on the width and height of table boxes.

This is discussed in section 2.2.57 "Tables in the visual formatting model"

3.1.95 CSS 2.1 Test: text-align-006.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/text-align-006.htm

The test case states:

```
<style type="text/css">
  hr
  {
  background-color: black;
  border-style: none;
  height: 33px;
  margin-top: 0px;
  margin-bottom: 0px;
  width: 198px;
  }

  hr#first {text-align: left;}

  hr#second {text-align: center;}

  hr#third {text-align: right;}

  hr#fourth {text-align: justify;}

  hr#fifth {text-align: inherit;}
  </style>

 </head>

 <body>

  <p>Test passes if there is one (and only one) filled black square.</p>

  <hr id="first">

  <hr id="second">
```

```
    <hr id="third">

    <hr id="fourth">

    <hr id="fifth">

    <hr>

   </body>
```

Expected Results

The test passes if there is one (and only one) filled black square.

Actual Results

There are two filled black squares.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because it is testing an assumption of how **HR** elements are handled.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2011Jan/0043.html

3.1.96 CSS 2.1 Test: text-decoration-087.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/text-decoration-087.htm

The test case states:

```
  <style type="text/css">
     div { color: orange; text-decoration: underline; }
     span { vertical-align: bottom; color: gray; }
     .inline-block { display: inline-block; width: 3em; }
     .up { vertical-align: 0.5em; }
    </style>
   </head>
   <body>
    <p>There should only be one solid orange line under the following
    text. If the line is broken at any point, or if there are two
    underlines anywhere, then the test has failed.</p>
    <div>
     <span> Test </span>
     <span class="inline-block"> test test test </span>
     <span> test </span>
     <span class="up"> test test </span>
     <span> test. </span>
    </div>
   </body>
```

Expected results

There should only be one solid orange line under all of the **span** elements that contain the word "test".

Actual results

The orange line is not drawn under the **span** element with the **display** property set as `inline-block`.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because an inline element that has the **text-decoration** property set to `underline` is not underlined.

This is discussed in section 2.1.78 "Section 16.3.1, Underlining, overlining, striking, and blinking: the 'text-decoration' property".

3.1.97 CSS 2.1 Test: text-transform-bicameral-021.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/text-transform-bicameral-021.htm

The test case states:

```
<style type="text/css">
.test span { text-transform: uppercase; }

/* the CSS below is not part of the test */
.test { font-size: 130%; line-height: 2.5; color: blue; }
.test div { white-space: nowrap; text-align: center;
             width: 5em; display: inline-block; }</style>
<script type="text/javascript">
//
function setFontFamily () {var fontName = document.getElementById( 'fontName' ).value;  var
divs = document.getElementsByTagName('div');  var i = 0; var div;  while (i < divs.length)
{     div = divs.item(i);    if (div.className == 'test') {       div.style.fontFamily =
fontName;       }    i++;    }  }
//
</script>
</head>
<body>
<p class="instructions">Test passes if the right-hand character in each pair matches the
left-hand one.</p>


<div class="test">
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
```

```
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
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<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div>□ <span>□</span></div>
<div><span>□</span> □ </div>
</div>


<p id="fontChange" style="display: none;" class="notes">If you are unable to see font glyphs
for certain characters using the browsers default font you can apply a specific font by
typing its name in the following box: <input class="css" name="fontName" id="fontName"
value="" type="text"> <button class="notes" type="button"
onclick="setFontFamily()">Apply</button></p><script type="text/javascript">if
(document.getElementById) {document.getElementById('fontChange').style.display =
'block'}</script>
</body>
```

Expected results

The test passes if the right-hand character in each pair matches the left-hand one.

Actual results

The pairs of characters do not match.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because the **text-transform** property has no effect on the Deseret alphabet.

This is discussed in section 2.1.80 "Section 16.5, Capitalization: the 'text-transform' property".

3.1.98 CSS 2.1 Test: text-transform-bicameral-022.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/text-transform-bicameral-022.htm

The test case states:

```
<style type="text/css">
.test span { text-transform: lowercase; }

/* the CSS below is not part of the test */
.test { font-size: 130%; line-height: 2.5; color: blue; }
.test div { white-space: nowrap; text-align: center;
             width: 5em; display: inline-block; }</style>
<script type="text/javascript">
//
function setFontFamily () {var fontName = document.getElementById( 'fontName' ).value;  var
divs = document.getElementsByTagName('div');  var i = 0; var div;  while (i < divs.length)
{     div = divs.item(i);    if (div.className == 'test') {       div.style.fontFamily =
fontName;       }    i++;    }  }
//
</script>
</head>
<body>
<p class="instructions">Test passes if the left-hand character in each pair matches the
right-hand one.</p>


<div class="test">
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
```

```
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □</div>
<div><span>□</span> □ </div>
</div>


<p id="fontChange" style="display: none;" class="notes">If you are unable to see font glyphs
for certain characters using the browsers default font you can apply a specific font by
typing its name in the following box: <input class="css" name="fontName" id="fontName"
value="" type="text"> <button class="notes" type="button"
onclick="setFontFamily()">Apply</button></p><script type="text/javascript">if
(document.getElementById) {document.getElementById('fontChange').style.display =
'block'}</script></body>
```

Expected results

The test passes if the right-hand character in each pair matches the left-hand one.

Actual results

The pairs of characters do not match.

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because the **text-transform** property has no effect on the Deseret alphabet.

This is discussed in section 2.1.80 "Section 16.5, Capitalization: the 'text-transform' property".

3.1.99 CSS 2.1 Test: text-transform-uppercase-002.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/text-transform-uppercase-002.htm

The test case states:

```
<body>
    <span style="text-transform:uppercase">ß</span>


</body>
```

Expected results

The Eszett character (ß) should be rendered as "SS" when it is capitalized.

Actual results

The Eszett character (ß) is not rendered as "SS".

It is clear that IE9 Mode fails the test by comparing the expected and actual results.

The test case fails because the Eszett character (ß) is not rendered as SS after **text-transform: capitalize** is applied.

This is discussed in section 2.1.80 "Section 16.5, Capitalization: the 'text-transform' property".

3.1.100 CSS 2.1 Test: widows-004c.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/widows-004c.htm

The test case states:

```
<style type="text/css">
  @page {
    margin: 7%;
  }
  html, body {
    height:100%;
    line-height:1;
  }
  * {
    margin:0;
    padding:0;
  }
  div {
    height: 100%;
    margin-bottom: -3em;
  }
  p {
    width: 1em;
    widows: -4;
  }
</style>
</head>
<body>
  <div>This test requires two pages. The letters 'a', 'b' and 'c' should appear on this page.
The letters 'd' and 'e' should appear on the next page.</div>
  <p>a b c d e</p>
</body>
```

Expected results

When viewing the content of this test on paged media, there should be two pages. The letters 'a', 'b', and 'c' should appear on the first page. The letters 'd' and 'e' should appear on the second page.

Actual results

When viewing the content of this test on paged media, the letters 'a' and 'b' appear on the first page. The letters 'c', 'd' and 'e' appear on the second page.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because negative values for the **margin-bottom** property are not rendered correctly on paged media.

Content outside the page box is discarded when negative margins are used.

This is discussed in section 2.1.26 " Section 8.3, Margin properties: 'margin-top', 'margin-right', 'margin-bottom', 'margin-left', and 'margin'"

3.1.101 CSS 2.1 Test: word-spacing-characters-001.htm

Test case

http://test.csswg.org/suites/css2.1/20101210/html4/word-spacing-characters-001.htm

The test case states:

```
<style type="text/css">
    div {
      margin: 1em;
      font-family: monospace;
      page-break-inside: avoid;
    }
    div p {
      margin: 0;
    }
    .controlcontrol {
      background: orange;
      width: 4em;
    }

    .control span {
      background: blue;
      color: blue;
    }
    .spacer {
      padding-left: 4em;
    }
    .test span {
      word-spacing: 4em;
      background: orange;
      color: orange;
    }
    .ws-pre p {
      white-space: pre;
    }
  </style>
 </head>
 <body>
   <p>In each of the following pairs, the blue and orange bars must have equal lengths.</p>

    <div>
      <p class="control"><span class="spacer"></span> </p>
      <p class="controlcontrol"> </p>
    </div>

   <div class="ws-normal">
     <p class="control"><span>A <span class="spacer"></span>B</span></p>
     <p class="test"><span>A B</span></p>
   </div>
   <div class="ws-normal">
     <p class="control"><span>A <span class="spacer"></span>B</span></p>
     <p class="test"><span>A  B</span></p>
   </div>
   <div class="ws-pre">
     <p class="control"><span>A <span class="spacer"></span> <span
class="spacer"></span>B</span></p>
     <p class="test"><span>A  B</span></p>
```

```
    </div>

    <div class="ws-normal">
      <p class="control"><span>A <span class="spacer"></span>B</span></p>
      <p class="test"><span>A B</span></p>
    </div>
    <div class="ws-normal">
      <p class="control"><span>A  <span class="spacer"></span><span
class="spacer"></span>B</span></p>
      <p class="test"><span>A  B</span></p>
    </div>
    <div class="ws-pre">
      <p class="control"><span>A  <span class="spacer"></span><span
class="spacer"></span>B</span></p>
      <p class="test"><span>A  B</span></p>
    </div>

    <div class="ws-normal">
      <p class="control"><span>A    <span class="spacer"></span><span
class="spacer"></span><span class="spacer"></span><span class="spacer"></span>B</span></p>
      <p class="test"><span>A    
     B</span></p>
    </div>
    <div class="ws-pre">
      <p class="control"><span>A      <span class="spacer"></span><span
class="spacer"></span><span class="spacer"></span><span class="spacer"></span><span
class="spacer"></span><span class="spacer"></span><span class="spacer"></span>  B</span></p>
      <p class="test"><span>A        B</span></p>
    </div>

  </body>
```

Expected Results

In each of the blue and orange bar pairs, the bars must have equal lengths.

Actual Results

The bars in the last pair do not have equal lengths.

It is clear that IE9 fails the test case by comparing the expected results with the actual results.

The test case fails because the test has an extra spacer **span** element in it.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2011Jan/0027.html .

3.2 Internet Explorer 8

This section contains W3C CSS 2.1 Conformance Test Suite failures for Windows® Internet Explorer® 8.

3.2.1 CSS 2.1 test: bidi-alt-001.htm - unicode-bidi: bidi-override in alt text

Test case

http://www.w3.org/Style/CSS/Test/CSS2.1/current/html4/bidi-alt-001.htm

The test case states:

```
<style type="text/css">
  .rtol {
  direction: rtl;
  unicode-bidi: bidi-override;
  }
  img {
  color:blue;
  }
</style>…
<p>The three lines below should be identical, and say "Three lines of readable
text".</p>
<p>Three lines of <img alt="readable" src=""> text</p>
<p>Three lines of <span class="rtol"><img alt="elbadaer" src=""></span> text</p>
<p>Three lines of <img alt="elbadaer" src="" class="rtol"> text</p>
```

Expected results

The three lines should be identical, and say "Three lines of readable text."

Actual results

All Document Modes (Internet Explorer 7 and Internet Explorer 8)

The three lines are not identical. Instead, they say:

"Three lines of readable text.

Three lines of elbadaer text.

Three lines of elbadaer text."

The test fails because alternative text (alt text) rendering is not clearly defined in the [CSS-Level2-2009] and [HTML] specifications, and the content of an element may include text when alt text is considered as content.

The [HTML] specification section 13.8, *How to specify alternate text*, states:

"Several non-textual elements (IMG, AREA, APPLET, and INPUT) let authors specify alternate text to serve as content when the element cannot be rendered normally."

However, the specification in the [CSS-Level2-2009] specification section 3, *Conformance: Requirements and Recommendations*, states:

"Replaced element

An element whose content is outside the scope of the CSS formatting model, such as an image"

"Rendered Content

Rendered content may also be alternate text for an element (e.g., the value of the XHTML "alt" attribute)"

"Content

The content of an element may include text"

Therefore, the alt text is treated as content. In addition, the use of the word "may" makes the test case optional based on the definition of "may" in [RFC2119]. As a result, Internet Explorer fails this test case.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Mar/0000.html.

3.2.2 CSS 2.1 Test: content-counter-004.htm & t1202-counter-04-b.htm - content: counter(c, square)

Test cases

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t1202-counter-04-b.htm

The test cases state:

```
    <style type="text/css">
    body { white-space: nowrap; }
    #test { counter-reset: c; }
    #test span { counter-increment: c; }
    #test span:before { content: counter(c, square); }
    </style>
  …
  <p>The following two lines should look <em>approximately</em> the same:</p>
  <div id="test">
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
   </div>
  <div>
     □
     □
     □
     □
     □
     □
     □
     □
     □
     □
     □
     □
   </div>
```

Expected results

The two lines should look approximately the same.

Actual results

The two lines look different.

The test fails because the test case compares the glyph used for a square counter style with the Unicode symbol `U+25FE` for a specific type of square. However, the [CSS-Level2-2009] specification section 12.5.1 states:

"Glyphs are specified with disc, circle, and square. Their exact rendering depends on the user agent."

Internet Explorer renders the square as the Unicode symbol `U+25A0` instead of `U+25FE`. As a result, Internet Explorer fails this test case.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0025.html.

3.2.3 CSS 2.1 Test: content-counters-004.htm & t1202-counters-04-b.htm - content: counters(c, ".", square)

Test cases

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t1202-counters-04-b.htm

```
The test cases state:


    <style type="text/css">
     body { white-space: nowrap; }
     body, #test { counter-reset: c; }
    p, #test span { counter-increment: c; }
    #test span:before { content: counters(c, ".", square); }

    </style>
  …
   <p>The following two lines should look <em>approximately</em> the same:</p>

   <div id="test">
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
     <span></span>
   </div>

   <div>
     □.□
     □.□
     □.□
     □.□
     □.□
     □.□
```

```
    □.□
    □.□
    □.□
    □.□
    □.□
    □.□
  </div>
```

Expected results

The two lines should look approximately the same.

Actual results

The two lines look different.

The test fails because the test case compares the glyph used for a square counter style with the Unicode symbol `U+25FE` for a specific type of square. However, the [CSS-Level2-2009] specification section 12.5.1 states:

"Glyphs are specified with disc, circle, and square. Their exact rendering depends on the user agent."

Internet Explorer renders the square as the Unicode symbol `U+25A0` instead of `U+25FE`. As a result, Internet Explorer fails this test case.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0025.html.

3.2.4 CSS 2.1 Test: content-counter-006.htm & t1202-counter-06-b.htm - content: counter(c, decimal-leading-zero)

Test cases

http://www.w3.org/Style/CSS/Test/CSS2.1/current/html4/content-counter-006.htm

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t1202-counter-06-b.htm

The test cases state:

```
  <style type="text/css">

    body { white-space: nowrap; }


    #test { counter-reset: c; }
    #test span { counter-increment: c; }
    #test span:before { content: counter(c, decimal-leading-zero); }

    </style>
  …

   <p>The following two lines should look the same:</p>

   <div id="test">
     <span></span>
     <span></span>
```

```
    <span></span>
    <span></span>
    <span></span>
    <span></span>
    <span></span>
    <span></span>
    <span></span>
    <span></span>
    <span></span>
    <span></span>
    <span style="counter-reset: c 98"></span>
    <span></span>
    <span></span>
  </div>

  <div>
    01
    
    
    04
    05
    06
    07
    08
    
    10
    11
    12
    99
    100
    101
  </div>
```

Expected results

The test and reference lines should look the same.

Actual results

All Document Modes (Internet Explorer 7)

The two lines look different.

The test fails because the reference line of the test case contains the characters ' ', ' ', and ' ', while the test line of the test case assumes that the numbers '02', '03', and '09' exist in the reference line where the space characters actually exist. As a result, Internet Explorer 7 fails this test case.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0026.html.

IE8 Mode (All Versions)

The two lines are identical, and Internet Explorer 8 passes the test case.

3.2.5 CSS 2.1 Test: margin-collapse-clear-005.htm & margin-collapse-clear-011.htm & t090502-mrgn-colaps-flt-11-d.htm - margin collapsing with clearance

Test cases

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t090502-mrgn-colaps-flt-11-d.htm

The test case states:

```
  …
  <style type="text/css">
    div.target1 { position: absolute; left: -15px; height: 50px; width: 0; border-
left: 10px solid yellow; top: 0px; }
    div.target2 { position: absolute; left: -15px; height: 20px; width: 0; border-
left: 5px solid aqua; border-right: 5px solid silver; top: 50px; }
    div.target3 { position: absolute; left: -15px; height: 50px; width: 0; border-
left: 5px solid orange; border-right: 5px solid silver; top: 100px; }
    div.target4 { position: absolute; left: -15px; height: 30px; width: 0; border-
left: 10px solid silver; top: 70px; }
    div.container { width: 150px; position: relative; margin-left: 20px; border:
solid thin; }
    div.box1 { height: 50px; background-color: yellow; }
    div.parentof2and3 { background-color: silver; padding-right: 10px; }
    div.box2 { background-color: aqua; float: left; width: 20px; height: 20px; }
    div.box3 { overflow: hidden; clear: left; margin-top: 50px; height: 50px;
background-color: orange; }
  </style>
 </head>
 <body>
  <p>The coloured bars on the left should match the coloured boxes in the black
box.</p>
  <div class="container">
    <div class="target1"></div>
    <div class="target2"></div>
    <div class="target3"></div>
    <div class="target4"></div>
    <div class="box1">A</div>
    <div class="parentof2and3">
      <div class="box2">B</div>
      <div class="box3">C</div>
    </div>
  </div>
 </body>
```

Expected results

The colored bars on the left should match the colored boxes in the container.

Actual results

The colored bars on the left do not match the colored boxes in the container.

Based on the test result, Internet Explorer fails this test case.

The test fails because this test case implements a proposed change to the clearance model that was rejected by the working group.

However, the [CSS-Level2-2009] specification section 9.5.2, *Controlling flow next to floats: the 'clear' property*, states:

"If the element's top border edge has not passed the relevant floats, then its clearance is set to the amount necessary to place the border edge of the block even with the bottom outer edge of the lowest float that must be cleared."

Internet Explorer ignores the **margin-top** setting of box3 and sets the border edge of the block even with the bottom outer edge of the float. There is no variation to the expected behavior.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0033.html.

3.2.6 CSS 2.1 Test: page-margin-000.htm - @page margins shorthand using fixed physical units

Test case

http://www.w3.org/Style/CSS/Test/CSS2.1/current/html4/page-margin-000.htm

The test case states:

```
style type="text/css">

 @page {

margin: 0.5in;

}

html, body {background: #ccc;}

 </style>
```

Expected results

```
This paragraph must appear inside a gray box. There should be a 0.5-inch margin
between the gray edge and paper edge on all sides.
```

Actual results

The text appears on a gray background with no visible margin. When printed, the document is rendered without a gray box. As a result, it is not possible to determine whether the printed page contains the specified 0.5-inch margin.

Based on this result, Internet Explorer fails this test case.

The test fails because "Print Background Colors and Images" is disabled by default. The test passes when one condition is met. The user must change the default setting for "Print Background Colors and Images" by selecting its corresponding box in the **Page Setup** dialog box. This dialog box is adjacent to the **Quick Print** button on the Internet Explorer toolbar.

3.2.7 CSS 2.1 Test: sgml-comments-000.htm - SGML comments

Test case

http://www.w3.org/Style/CSS/Test/CSS2.1/current/html4/sgml-comments-000.htm

The test case states:

```
<style type="text/css">
p {color: red}
</style>
```

Expected results

The text should be rendered in the color green, and not in the color red.

Actual results

All Document Modes (Internet Explorer 7)

The text is rendered in the color red, and not in the intended color green.

Based on this result, Internet Explorer 7 fails this test case.

The test fails because the test code does not contain SGML comment delimiters. When SGML comment delimiters are introduced, as follows, the text is rendered in black:

```
<style type="text/css">

p {<!-- color: red -->}

</style>
```

The test code does not contain instructions that would cause the text to render as the intended color green. For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0027.html.

IE8 Mode (All Versions)

The text is rendered in the color green, and Windows® Internet Explorer® 8 passes the test case.

3.2.8 CSS 2.1 Test: t040302-c61-phys-len-00-b.htm - length units

Test case

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t040302-c61-phys-len-00-b.htm

The test case states:

```
<style type="text/css">
   p { color: navy; }
   .container { border-left: solid; }
   .container div { border-left: solid; height: 1em; }
   .four {margin-left:  3.37007874015748in;}
   .five {margin-left:  8.56000000000000cm;}
   .six {margin-left:   85.6000000000000mm;}
   .seven {margin-left: 242.645669291339pt;}
   .eight {margin-left: 20.2204724409449pc;}
   .nine {margin-left: +20.2204724409449pc;}
</style>
```

Expected results

There should be a distance of exactly the length of a credit card between two unbroken vertical bars on the screen.

Actual results

The two vertical bars are unbroken, which means that all of the specified relative unit lengths are displayed equivalently. However, the actual onscreen distance between the two vertical bars depends on factors such as physical screen size and display resolution settings.

Based on the test result, Internet Explorer fails this test case.

The test fails because the actual onscreen distance between the two vertical bars depends on factors such as physical screen size and display resolution settings. However, the distance between the two vertical bars is correct on a printed version of this test case.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0034.html.

3.2.9 CSS 2.1 Test: t0511-c21-pseud-anch-00-e-i.htm - anchor

Test case

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t0511-c21-pseud-anch-00-e-i.htm

The test case states:

```
<style type="text/css">
   a {color: green;}
   a:link {color: red;}
   a:visited {color: red;}
   a:hover {color: green;}
   a:focus {color: red;}
   a:active {color: red;}
   #one {color: red;}
  </style>
```

Expected results

The hyperlinked sentence should appear in green, and it should remain green when selected.

Actual results

The color of the hyperlinked sentence changes to red while the mouse button is pressed. The sentence goes back to the color green when the mouse button is released. Based on this test result, Internet Explorer fails this test case.

The [CSS-Level2-2009] specification section 5.11.3, *The dynamic pseudo-classes: :hover, :active, and :focus*, states:

"The :active pseudo-class applies while an element is being activated by the user. For example, between the times the user presses the mouse button and releases it."

However, the **:active** pseudo-class in this test case is applied to the anchor element when the anchor element is activated (selected with a mouse or selected by giving the element focus and then pressing the ENTER key).

The test pass condition may need clarification. The test passes if the test pass condition is changed to "This sentence should be green unless it is activated."

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0035.html.

3.2.10 CSS 2.1 Test: t0803-c5504-mrgn-l-02-c.htm - margin-left

Test case

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t0803-c5504-mrgn-l-02-c.htm

The test cases states:

```
<style type="text/css">
 html { margin: 0; padding: 8px; }
 body { margin: 0; padding: 0; }
 .five { margin-left: -10px; color: navy; }
</style>
```

Expected results

The test page should have a horizontal scroll bar.

Actual results

No horizontal scroll bar is present. Based on this test result, Internet Explorer fails this test case.

The test fails because the test case assumes that a negative margin results in a horizontal scroll bar. The [CSS-Level2-2009] specification currently does not define a scrolling behavior with a negative margin; the behavior is left up to user agents to decide. As a result, Internet Explorer fails the test case.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0029.html.

3.2.11 CSS 2.1 Test: tt090204-display-change-01-b-ao.htm - updating layout on display changes

Test case

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t090204-display-change-01-b-ao.htm

The test case states:

```
…
  <script type="text/javascript">
    function test() {
      document.getElementById('float').style.display = 'none';
    }
    document.addEventListener("load", test, false);
  </script>
  <style>
    #float { width: 100%; float:left; }
    div { background: red; color: green; width: 1em; font-family: Ahem; }
  </style>
```

```
  </head>
  <body>
    <p>There should be no red below, only green.</p>
    <div id="float">X</div>
    <div>
      X
    </div>
  </body>
```

Expected results

No red color should appear; only green color should appear.

Actual results

Both green and red colors appear.

The test fails because this test case primarily tests Cascading Style Sheet Object Model (CSSOM) functionality instead of updating layout on display changes. As a result, Internet Explorer fails this test case.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0030.html.

3.2.12 CSS 2.1 Test: t1008-c44-ln-box-02-d-ag.htm - the height of lines

Test case

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t1008-c44-ln-box-02-d-ag.htm

The test case states:

```
…
<style type="text/css">
   div { font: 20px/40px Ahem; color: white; background: red url(support/css1test44c.png) no-
repeat;
         width: 14em; padding: 0.5em 1em; border: 1em solid green; }
   img.twoc { vertical-align: middle; width: 2em; height: 2em; padding: 0.4em
0.5em 0.6em; border: solid 1em; margin: -1.5em -0.5em; }
  </style>
  <link rel="help" href="http://www.w3.org/TR/CSS21/visudet.html#line-height"
title="10.8 Line height calculations: the 'line-height' and 'vertical-align'
properties">
 </head>
 <body>
  <p>There should be no red below, just the outline of an empty green box.</p>
  <div>
   xxxx xxxx xxxx
   xxxx xxxx xxxx
   xxxx
   <img alt="" src="support/swatch-white.png" class="twoc">
             xxxx
   xxxx xxxx xxxx
   xxxx xxxx xxxx
  </div>
 </body>
```

Expected results

The outline of an empty green box should appear, with no red.

Actual results

The green box contains red. Based on this test result, Internet Explorer fails this test case.

The test fails because the background image of this test case is off by 1 pixel.

The [CSS-Level2-2009] specification section 10.8.1, *Leading and half-leading*, states:

"Align the vertical midpoint of the box with the baseline of the parent box plus half the x-height of the parent."

Based on this specification, the computed mask image is 21 pixels above and 9 pixels below the baseline. The 15-pixel X characters have 12 pixels ascent and 3 pixels descent, which requires 9 pixels of white fill above them and 6 pixels below them. The background image, however, assumes 10 pixels on top and 5 pixels below. As a result, the background image of this test case is off by 1 pixel.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0036.html.

3.2.13 CSS 2.1 Test: t100801-c544-valgn-01-d-ag.htm - vertical-align

Test case

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t100801-c544-valgn-01-d-ag.htm

This test case states:

```
<style type="text/css">
   .test {font: 15px/1 Ahem; color: green; background: red
url(support/css1test544b.png) no-repeat; width: 90px; margin: 0 1em;}
   img {height: 30px;}
   .big {font-size:200%;}
   .three {vertical-align: top; font-size: 15px;}
   .four {vertical-align: text-top; font-size: 15px;}
   .five {vertical-align: middle; font-size: 15px;}
   .six {vertical-align: bottom; font-size: 15px;}
   .seven {vertical-align: text-bottom; font-size: 15px;}
   .eight {vertical-align: baseline; font-size: 15px;}
   .nine {vertical-align: 50%; font-size: 15px; line-height: 20px;}
  </style>
  <link rel="help" href="http://www.w3.org/TR/CSS21/visudet.html#leading"
title="10.8.1 Leading and half-leading">
 </head>
 <body>
  <p>There should be a green block with no red below.</p>
  <div class="test">
   <div><img alt="FAIL: Image support required." src="support/swatch-
green.png"><span class="three">X</span>X</div>
   <div><img alt="FAIL: Image support required." src="support/swatch-
green.png"><span class="big"><span class="four">X</span>X</span></div>
   <div><img alt="FAIL: Image support required." src="support/swatch-green.png"
class="five">X</div>
   <div><img alt="FAIL: Image support required." src="support/swatch-
```

```
green.png"><span class="big"><span class="six">X</span>X</span></div>
   <div><img alt="FAIL: Image support required." src="support/swatch-
green.png"><span class="big"><span class="seven">X</span>X</span></div>
   <div><img alt="FAIL: Image support required." src="support/swatch-
green.png"><span class="big"><span class="eight">X</span>X</span></div>
   <div><img alt="FAIL: Image support required." src="support/swatch-
green.png"><span class="nine">X</span>X</div>
  </div>
 </body>
```

Expected results

The outline of an empty green box should appear, with no red.

Actual results

The green box contains red. Based on the test result, Internet Explorer fails this test case.

The test fails because the background image of this test case is off by 1 pixel.

The [CSS-Level2-2009] specification section 10.8.1, *Leading and half-leading*, states:

"Align the vertical midpoint of the box with the baseline of the parent box plus half the x-height of the parent."

Based on this specification, the computed mask image is 21 pixels above and 9 pixels below the baseline. The 15-pixel X characters have 12 pixels ascent and 3 pixels descent, which requires 9 pixels of white fill above them and 6 pixels below them. The background image, however, assumes 10 pixels on top and 5 pixels below. As a result, the background image of this test case is off by 1 pixel.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0036.html.

3.2.14 CSS 2.1 Test: t1205-c561-list-displ-00-b.htm - display

Test case

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t1205-c561-list-displ-00-b.htm

This test case states:

```
<style type="text/css">
   p, div { color: navy; }
   .one {display: block;}
   .two {display: inline;}
   .three {display: list-item; list-style-type: decimal; list-style-position:
inside;}
   .four {display: none; color: yellow; background: red;}
   a {display: block;}
  </style>
  <link rel="help" href="http://www.w3.org/TR/CSS21/generate.html#lists"
title="12.5 Lists">
  <link rel="help" href="http://www.w3.org/TR/CSS21/visuren.html#display-prop"
title="9.2.4 The 'display' property">
 </head>
 <body>
```

```
  <p class="pc">There should be eight numbered lines below, all identical except
for the numbering, which should match the description. </p>
  <div class="three"> This should be line one. </div>
  <div class="one"> 2. This should be line two. </div>
  <div class="two"> 3. This should </div>
  <div class="two"> be line three. </div>
  <div> 4. This should be line four. </div>
  <div class="four"> FAIL: This text should not appear. </div>
  <div> 5. This should be line five. <span class="four">FAIL: This text should not
appear.</span> </div>
  <div> 6. This should be line six. <a>7. This should be line seven.</a> 8. This
should be line eight. </div>
 </body>
```

Expected results

There should be eight numbered lines, all identical except for the numbering, which should match the description.

Actual results

Numbered lines are not identical.

The test fails because markers have padding, a margin, or both that do not collapse with an adjoining space. This test case assumes a list marker box contains a marker followed by a space. It logically expects the latter to collapse with the leading space of the first list item by positioning the marker inside.

However, the [CSS-Level2-2009] specification section 12.5.1, *Lists: the 'list-style-type', 'list-style-image', 'list-style-position', and 'list-style' properties*, states:

"inside

The marker box is the first inline box in the principal block box, after which the

element's content flows. CSS 2.1 does not specify the precise location of the marker box."

[CSS-Level2-2009] does not specify the precise location of the marker box. As a result, Internet Explorer fails the test case.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0032.html.

3.2.15 CSS 2.1 Test: t1504-c543-txt-decor-00-d-g.htm - text-decoration

Test case

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t1504-c543-txt-decor-00-d-g.htm

This test case states:

```
<style type="text/css">
   p { color: navy; }
   .one {text-decoration: underline;}
   .two {text-decoration: overline;}
   .three {text-decoration: line-through;}
   .four {text-decoration: blink;}
```

```
    b.five {text-decoration: none;}
    .six {text-decoration: underline overline;}
    .seven {text-decoration: underline overline line-through;}
    div, strong, img { color: red; }
    span { color: white; }
   </style>
   <link rel="help" href="http://www.w3.org/TR/CSS21/fonts.html#font-styling"
title="15.4 Font styling: the 'font-style' property">
 </head>
 <body>
   <p class="one"> This sentence should be underlined. </p>
   <p class="two"> This sentence should be overlined. </p>
   <p class="three"> This sentence should be stricken out. </p>
   <p class="four"> This sentence should be blinking (if the UA supports that). </p>
   <p class="one"> The sentence should be underlined. <b class="five">This sentence
should be underlined</b>. </p>
   <p class="six"> This sentence should be underlined and overlined. </p>
   <p class="seven"> This sentence should be underlined, overlined, and stricken.
</p>
   <div class="seven"></div> <!-- there should be no red on this page -->
   <p> There should be no red at the end of this line.<strong class="one">
</strong> </p> <!-- the NBSP (there is one after the strong end tag) makes the
strong element's space not be collapsed -->
   <p> There should be no red at the end of this line.<img alt="FAIL: Images
required." src="support/swatch-white.png" class="one"> </p>
   <p class="one">
    The text of this sentence and all its spaces (including the space between the
images)
    <img alt="FAIL: Images required." src="support/square-teal.png">
    <img alt="FAIL: Images required." src="support/square-purple.png">
    should be underlined, but the images themselves should <em>not</em> be
underlined.
   </p>
   <p class="one">
    There should be a long blue underline between here: <span> FAIL FAIL FAIL FAIL
</span> :and here.
   </p>
 </body>
```

Expected results

There should be no red at the end of the line (the fourth test from the bottom).

Actual results

There is red at the end of the line.

The test fails because the text-decoration description in [CSS-Level2-2009] is ambiguous.

The [CSS-Level2-2009] specification section 16.3.1, *Underlining, overlining, striking, and blinking: the 'text-decoration' property*, states:

"Underlines, overlines, and line-throughs are applied only to text (including white space, letter spacing, and word spacing): margins, borders, and padding are skipped. If an element contains no text, user agents must refrain from rendering these text decorations on the element. For example, images will not be underlined."

Internet Explorer interprets this as requiring this space to be underlined. As a result, Internet Explorer fails the test case.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0039.html.

3.2.16 CSS 2.1 Test: t1604-c541-word-sp-01-b-a.htm - word-spacing

Test case

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t1604-c541-word-sp-01-b-a.htm

The test case states:

```
<style type="text/css">
   div { font: 24px/1 Ahem; width: 12em; background: yellow; color: aqua; margin: 0 0 0 2em;
}
   .eight {word-spacing: 24px;}
   .nine {word-spacing: normal;}
   .ten {word-spacing: 300%;}
   .eleven {word-spacing: -1em;}
  </style>
  <link rel="help" href="http://www.w3.org/TR/CSS21/text.html#spacing-props"
title="16.4 Letter and word spacing: the 'letter-spacing' and 'word-spacing'
properties">
 </head>
 <body>
  <p>There should be a stripy pattern of yellow and aqua below (each vertical
stripe should be straight and unbroken).</p>
  <div class="test">x  x  xx xx</div>
  <div class="test">x  x  xx xx</div>
  <div class="test">x  x  xx xx</div>
  <div class="eight"> x x <span class="nine">xx xx</span> </div>
  <div class="ten"> x  x  xx xx </div>
  <div class="eleven"> x   x   xx  xx </div>
 </body>
```

Expected results

A striped pattern of yellow and aqua should appear. Each vertical stripe should be straight and unbroken.

Actual results

There are broken vertical stripes.

The test fails because the test case assumes the word-spacing property does not affect nonbreaking spacing.

However, the [CSS-Level2-2009] specification section 16.4, *Letter and word spacing: the* 'letter-spacing' *and* 'word-spacing' *properties*, states:

"Word spacing affects each space (U+0020), non-breaking space (U+00A0), and ideographic space (U+3000) left in the text after the white space processing rules have been applied."

Word-spacing property affects nonbreaking spacing. As a result, Internet Explorer fails this test case.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0037.html.

3.2.17 CSS 2.1 Test: t1604-c542-letter-sp-01-b-a.htm - letter-spacing

Test case

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t1604-c542-letter-sp-01-b-a.htm

The test case states:

```
<style type="text/css">
   div { font: 24px/1 Ahem; width: 15em; background: yellow; color: aqua; margin: 0
0 0 2em; }
   .eight {letter-spacing: 48px;}
   .nine {letter-spacing: normal;}
   .ten {letter-spacing: 300%;}
   .eleven {letter-spacing: -0.5em;}
  </style>
  <link rel="help" href="http://www.w3.org/TR/CSS21/text.html#spacing-props"
title="16.4 Letter and word spacing: the 'letter-spacing' and 'word-spacing'
properties">
 </head>
 <body>
  <p>There should be a stripy pattern of yellow and aqua below (each vertical
stripe should be straight and unbroken).</p>
  <div class="test">x  x    xx xx </div>
  <div class="test">x  x    xx xx </div>
  <div class="test">x  x    xx xx </div>
  <div class="eight"> xx <span class="nine">xx xx</span> </div> <!-- this test
assumes letter-spacing is distributed evenly on both sides of each letter (half on
each side), which is not specified in the spec (the spec leaves this undefined) -->
  <div class="ten">x  x    xx xx </div>
  <div class="eleven">x     x     
   x x   x x </div>
 </body>
```

Expected results

A striped pattern of yellow and aqua should appear. Each vertical stripe should be straight and unbroken.

Actual results

There are broken vertical stripes.

The test fails because the test case validates undefined behavior and expects letter spacing to be divided and split evenly on each side of a character.

However, [CSS-Level2-2009] currently does not define letter-spacing distribution. As a result, Internet Explorer fails this test case.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0038.html.

3.2.18 CSS 2.1 Test: t1605-c545-txttrans-00-b-ag.htm - text-transform

Test case

http://www.w3.org/Style/CSS/Test/CSS2.1/20061011/html4/t1605-c545-txttrans-00-b-ag.htm

The test case states:

```
<style type="text/css">
   div { font: 10px/1 Ahem; color: green; background: red
url(support/css1test545.png); border: solid black; width: 32em; }
   p { margin: 0; }
   .ttn {text-transform: none;}
   .cap {text-transform: capitalize;}
   .upp {text-transform: uppercase;}
   .low {text-transform: lowercase;}
  </style>
  <link rel="help" href="http://www.w3.org/TR/CSS21/text.html#caps-prop"
title="16.5 Capitalization: the 'text-transform' property">
 </head>
 <body>
  <p>There should be a green box below.</p>
  <div>
   <p class="">
    Xx xx x. (x.x. XX) x x <span class="cap">xx</span>xxx <span class="ttn">xxx</span>
    Pp pp p. (p.p. PP) p p <span class="cap">pp</span>ppp <span class="ttn">ppp</span>
    Éé éé é. (é.é. ÉÉ) é é <span class="cap">éé</span>ééé <span class="ttn">ééé</span>
   </p>
   <p class="ttn">
    Xx xx x. (x.x. XX) x x <span class="cap">xx</span>xxx <span class="ttn">xxx</span>
    Pp pp p. (p.p. PP) p p <span class="cap">pp</span>ppp <span class="ttn">ppp</span>
    Éé éé é. (é.é. ÉÉ) é é <span class="cap">éé</span>ééé <span class="ttn">ééé</span>
   </p>
   <p class="cap">
    Xx xx x. (x.x. XX) x x <span class="cap">xx</span>xxx <span class="ttn">xxx</span>
    Pp pp p. (p.p. PP) p p <span class="cap">pp</span>ppp <span class="ttn">ppp</span>
    Éé éé é. (é.é. ÉÉ) é é <span class="cap">éé</span>ééé <span class="ttn">ééé</span>
   </p>
   <p class="upp">
    Xx xx x. (x.x. XX) x x <span class="cap">xx</span>xxx <span class="ttn">xxx</span>
    Pp pp p. (p.p. PP) p p <span class="cap">pp</span>ppp <span class="ttn">ppp</span>
    Éé éé é. (é.é. ÉÉ) é é <span class="cap">éé</span>ééé <span class="ttn">ééé</span>
   </p>
   <p class="low">
    Xx xx x. (x.x. XX) x x <span class="cap">xx</span>xxx <span class="ttn">xxx</span>
    Pp pp p. (p.p. PP) p p <span class="cap">pp</span>ppp <span class="ttn">ppp</span>
    Éé éé é. (é.é. ÉÉ) é é <span class="cap">éé</span>ééé <span class="ttn">ééé</span>
   </p>
  </div>
 </body>
```

Expected results

There should be a green box with no red.

Actual results

The green box contains red.

The test fails because the test case background image is currently off by a few pixels. The characters in question are `é.é`, as shown in the following code from the test case:

```
<p class="cap">
 Éé éé é. (é.é. ÉÉ) é é <span class="cap">éé</span>ééé <span class="ttn">ééé</span>
</p>
```

The [UNICODE-A29] specification section 4, *Word Boundaries*, states:

```
WB7. ALetter (MidLetter | MidNumLet) × ALetter

WB14. Any ÷ Any
```

The first é following the parenthesis falls into the WB14 rule and is considered an Any ÷ Any case. Internet Explorer capitalizes the é because parentheses do not fall into any of the other rules. As a result, Internet Explorer fails the test case. Note that the second é directly follows a period and is not capitalized, which is allowed by the test case.

For more information, see http://lists.w3.org/Archives/Public/public-css-testsuite/2009Feb/0040.html.

4 Appendix B: Cascading Style Sheets (CSS) Level 1 Conformance Statements

This section describes variations from MAY and SHOULD requirements for features in the *Cascading Style Sheets, level 1* [CSS-Level1-2008] specification (revised April 11, 2008). Only requirements that directly conflict with CSS 2.1 features in the [CSS-Level2-2009] specification are included.

4.1 [CSS-Level1-2008] Section 2.1, Anchor pseudo-classes

V0901:

The [CSS-Level1-2008] specification states:

```
Section 2.1: Anchor pseudo-classes

All 'A' elements with an 'HREF' attribute will be put into one and only one of
these groups.
```

All Document Modes (All Versions)

The **:active** pseudo-class is not mutually exclusive with the **:link** and **:visited** pseudo-classes.

V0902:

The [CSS-Level1-2008] specification states:

```
Section 2.1: Anchor pseudo-classes

In CSS1, anchor pseudo-classes have no effect on elements other than 'A'.
Therefore, the element type can be omitted from the selector:

A:link { color: red }

:link { color: red }
```

IE8 Mode and IE9 Mode (All Versions)

The anchor pseudo-classes can be applied to elements other than **<a>**.

C0901:

The [CSS-Level1-2008] specification states:

```
Section 2.1: Anchor pseudo-classes

UAs may choose to move an element from 'visited' to 'link' after a certain time.
```

Quirks Mode and IE7 Mode (All Versions)

Elements are not changed from `visited` to `link` after a certain time.

4.2 [CSS-Level1-2008] Section 3.1, 'important'

V0903:

The [CSS-Level1-2008] specification states:

```
Section 3.1: A reader rule with an important declaration will override an author
rule with a normal declaration. An author rule with an important declaration will
override a reader rule with an important declaration.
```

All Document Modes (All Versions)

Precedence is given to **!important** reader rules over **!important** author rules.

4.3 [CSS-Level1-2008] Section 4.1.2, Horizontal formatting

V0904:

The [CSS-Level1-2008] specification states:

```
Section 4.1.2: If exactly one of 'margin-left', 'width' or 'margin-right' is
'auto', the UA will assign that property a value that will make the sum of the
seven equal to the parent's width. If none of the properties are 'auto', the value
of 'margin-right' will be assigned 'auto'. If more than one of the three is 'auto',
and one of them is 'width', then the others ('margin-left' and/or 'margin-right')
will be set to zero and 'width' will get the value needed to make the sum of the
seven equal to the parent's width. Otherwise, if both 'margin-left' and 'margin-
right' are 'auto', they will be set to equal values. This will center the element
inside its parent. If 'auto' is set as the value for one of the seven properties in
an element that is inline or floating, it will be treated as if it were set to
zero.
```

All Document Modes (All Versions)

Determining whether the **margin-left** property or the **margin-right** property is assigned to `auto` when neither property is set to `auto` depends on the writing direction of the block (RTL or LRT). This behavior is in accordance with the [CSS-Level2-2009] specification.

4.4 [CSS-Level1-2008] Section 5.2.6, font-size

V0905:

The [CSS-Level1-2008] specification states:

```
Section 5.2.6: On a computer screen a scaling factor of 1.5 is suggested between
adjacent indexes.
```

IE7 Mode, IE8 Mode, and IE9 Mode (All Versions)

A fixed scaling factor of 1.5 is not used. A scaling factor of 1.2 is used in accordance with the [CSS-Level2-2009] specification section 15.7.

4.5 [CSS-Level1-2008] Section 5.4.7, text-indent

V0906:

The [CSS-Level1-2008] specification states:

```
Section 16.1:

text-indent

Value:                  <length> | <percentage>
Initial:                0
Applies to:             block-level elements
Inherited:              yes
Percentage values:      refer to parent element's width
```

Quirks Mode and IE7 Mode (All Versions)

The percentage is evaluated with regards to the width of the containing block rather than the width of the parent element (which may not be a block-level element).

4.6 [CSS-Level1-2008] Section 5.5.23, width

V0907:

The [CSS-Level1-2008] specification states:

```
Width

Value:                  <length> | <percentage> | auto
Initial:                auto
Applies to:             block-level and replaced elements
Inherited:              no
Percentage values:      refer to parent element's width
```

All Document Modes (All Versions)

With the exception of absolutely positioned elements in quirks mode, percentage widths are calculated based on the width of the containing block.

IE7 Mode, IE8 Mode, and IE9 Mode (All Versions)

For absolutely positioned elements whose containing block is based on a block-level element, the percentage width is calculated with respect to the width of the padding box of the element.

4.7 [CSS-Level1-2008] Section 5.5.24, height

V0908:

The [CSS-Level1-2008] specification states:

```
Section 5.5.24:

Height

Value:                  <length> | auto
Initial:                auto
Applies to:             block-level and replaced elements
Inherited:              no
Percentage values:      N/A
```

IE7 Mode, IE8 Mode, and IE9 Mode (All Versions)

The percentage height is calculated according to the [CSS-Level2-2009] specification, which allows for percentage values.

4.8 [CSS-Level1-2008] Section 5.6.1, display

V0909:

The [CSS-Level1-2008] specification states:

```
Section 5.6.1:

Display

Value:                  block | inline | list-item | none
Initial:                block
Applies to:             all elements
Inherited:              no
Percentage values:      N/A
```

All Document Modes (All Versions)

The default display value is `inline`, rather than `block`, in accordance with the [CSS-Level2-2009] specifications.

V0910:

The [CSS-Level1-2008] specification states:

```
Section 5.6.1:

The initial value of 'display' is 'block', but a UA will typically have default
values for all HTML elements according to the suggested rendering of elements in
the HTML specification [2].
```

All Document Modes (All Versions)

The default value for blocks is `inline`, in accordance with the [CSS-Level2-2009] specifications.

4.9 [CSS-Level1-2008] Section 7.1, Forward-compatible parsing

V0911:

The [CSS-Level1-2008] specification states:

```
Section 7.1: Selectors (element names, classes and IDs) can contain only the
characters A-Z, 0-9, and Unicode characters 161-255, plus dash (-); they cannot
start with a dash or a digit; they can also contain escaped characters and any
Unicode character as a numeric code.
```

All Document Modes (All Versions)

Character encodings that require two bytes are allowed.

V0912:

The [CSS-Level1-2008] specification states:

```
The backslash followed by at most four hexadecimal digits (0..9A..F) stands for the
Unicode character with that number.
```

All Document Modes (All Versions)

Character encodings that use six hexadecimal digits are allowed.

4.10 [CSS-Level1-2008] Appendix B, CSS1 grammar

V0913:

The [CSS-Level1-2008] specification, Appendix B, states:

```
nmchar    [-a-z0-9]|{latin1}|{escape}
name    {nmchar}+

"."{name}    {BEGIN(AFTER_IDENT); return CLASS;}
```

Quirks Mode (All Versions)

Class names that begin with an unescaped digit are allowed in all cases, even if it is a known dimension.

Note In [CSS-Level1-2008], a class name could start with a digit (for example, `.55ft`), unless it was a dimension (`.55in`). In [CSS-Level2-2009], such classes are parsed as unknown dimensions (to allow for future additions of new units). To make `.55ft` a valid class, [CSS-Level2-2009] requires the first digit to be escaped (for example, `.\\35 5ft`).

V0914:

IE7 Mode, IE8 Mode, and IE9 Mode (All Versions)

Class names that begin with an unescaped digit are not allowed in any case.

5 Appendix C: hasLayout

To optimize layout, elements in quirks mode and IE7 mode fall into one of the following categories:

- The element is responsible for sizing and positioning all of its content and that of its child elements. It has layout by default.
- The element is reliant upon an ancestor element for sizing and positioning and does not have layout.

The **hasLayout** property is a Document Object Model (DOM) property that indicates when an element has a layout. It is used internally only in quirks mode and IE7 mode to implement CSS positioning. It is not used at all in IE8 mode or IE9 Mode.

The property is true when:

- An element has layout by default
- The property of an element that does not have layout by default is assigned a value. Resetting the property value to the element's default value resets the value of **hasLayout** to `false`.

5.1 The hasLayout HTML Elements

The following HTML elements always have layout by default:

- **html**, **body**
- **table**, **tr**, **th**, **td**
- **img**
- **hr**
- **input**, **button**, **select**, **textarea**, **fieldset**, **legend**
- **iframe**, **embed**, **object**, **applet**
- **marquee**

5.2 The hasLayout Property Triggers and Resets

For elements that do not have layout by default, the following table lists the set of properties that enable or reset the **hasLayout** property. For example, assigning a **width** value to a **div** element gives it layout. Resetting the **width** to `auto` disables layout.

Mode	Property	Trigger Value(s)	Reset Values(s)
Quirks, IE7	width	any	auto
Quirks, IE7	height	any	auto
Quirks, IE7	zoom	any	normal
Quirks, IE7	position	absolute	static, relative
Quirks, IE7	display	inline-block	All other display values

Mode	Property	Trigger Value(s)	Reset Values(s)
Quirks, IE7	float	left or right	none
Quirks, IE7	writing-mode	tb-rl	lr-tb
IE7	min-height	any	
IE7	max-height	any	none
IE7	min-width	any	
IE7	max-width	any	none
IE7	overflow	any	visible
IE7	overflow-x	any	Visible
IE7	overflow-y	any	visible
IE7	position	fixed	static, relative

5.3 The hasLayout Property and CSS2.1

The **hasLayout** property conflicts with a number of normative CSS rules, although it is similar in concept to block formatting contexts. This section discusses those issues.

- Resolving Containing Blocks

In IE7 mode, only elements that have layout can be containing blocks, which conflicts with CSS2.1 normative definition (see 10.1). Not all block elements have layout by default, yet block elements should be the containing blocks of all their children that have relative or static positioning.

As a result, IE7 mode may not treat the following HTML elements as containing blocks when it otherwise should:

- **div**
- **p**
- **ul**
- **ol**
- **pre**
- **h1** through **h6**
- **form**
- **fieldset**
- **dl**
- **blockquote**

Very often, the **position** property of a **div** element is assigned a value of `relative` to ensure that the absolutely positioned elements within are bound by the containing block of the **div** element. In

quirks mode, the absolutely positioned child element escapes the boundaries of its containing block. It then is typically positioned with respect to the body element.

Windows® Internet Explorer® in IE8 mode and IE9 mode has addressed the following issues. See section 2.2.26.

- Collapsing Margins

The [CSS-Level2-2009] specification states that the top margin of a child element can collapse with the top margin of its parent element as long as the parent has no padding or border.

In IE7 mode, these margins do not collapse when the parent element has layout. See section 2.2.16 and section 2.1.27.

- Laying Out and Clearing Floats

In IE7 mode, when an element has layout, its box size expands to include all floated child elements, so that clearing floats has no effect outside the float's layout container.

In addition, if a non-floated element follows a float, the content box of the element is displaced by the float and not just by its content.

- Drawing Background Colors and Images

All borders are drawn on top of box backgrounds, so that when the border style is not continuous (such as a dotted border), the specified background color shows.

In IE7 mode, the background color shows in a non-continuous border only when the element does not have layout.

Background images are positioned within the element's padding box by default so that the background image should not bleed underneath the border. The exception is when the image is tiled and positioned at 0,0; in this instance, the image bleeds underneath the border.

In IE7 mode, a tiled background image does not bleed under the border if the element has layout.

- Laying Out Form Elements

In IE7 mode, the horizontal margins of the input elements **text** and **textarea** in an element with layout is the sum of the horizontal margins of their containing boxes up to, but not including, the next **hasLayout** container.

6 Appendix D: Almost Standards Mode

Line height calculations as specified in [CSS-Level2-2009] can sometimes result in broken page rendering. In particular, any design that involves table cells and other blocks that contain only images, such as custom buttons or controls that are a map of GIF images laid out using an invisible table, cause these broken pages. Almost standards mode was developed to fix these problems and enable these pages to render correctly.

6.1 How the Almost Standards Mode is Implemented

Almost standards mode is triggered only when the DOCTYPE prolog specifies:

- One of the following public identifiers:
  - "-//W3C//DTD XHTML 1.0 Transitional//EN"
  - "-//W3C//DTD XHTML 1.0 Frameset//EN"
- One of the following public identifiers with a system identifier:
  - "-//W3C//DTD HTML 4.0 Transitional//EN"
  - "-//W3C//DTD HTML 4.0 Frameset//EN"
  - "-//W3C//DTD HTML 4.01 Transitional//EN"
  - "-//W3C//DTD HTML 4.01 Frameset//EN"

These Document Type Definitions (DTDs) are the only triggers for almost standards mode. Users cannot trigger almost standards mode through the user interface of their browsers because it is not listed as an option on the developer toolbar.

6.2 Line Height Calculations in Almost Standards Mode

Inline elements contribute to line height if and only if one of the following is true.

If the element:

- Contains text characters
- Has a nonzero border width
- Has a nonzero margin
- Has a nonzero padding
- Has a background image
- Has vertical-align set to a value other than `baseline`

Note that a line break is not considered a text character for this definition unless it is the only content of a line box. In that case, the line box height remains the uppermost inline box top and the lowermost inline box bottom on the line, regardless of the specified line height.

If an **img** element is the sole content of a table cell, the line box height of the cell line box height is adjusted to zero.

6.3 The Almost Standards Mode and CSS2.1

Almost standards mode conflicts with the normative statements found in Chapter 10 of the [CSS-Level2-2009] specification:

- In subsection 10.8, the specification states:

```
4. If the resulting height is smaller than the minimal height of line boxes for this
block, as specified by the 'line-height' property, the height is increased to be that
minimal height.
Empty inline elements generate empty inline boxes, but these boxes still have margins,
padding, borders and a line height, and thus influence these calculations just like
elements with content.
```

  See section 2.1.52.

- In subsection 10.8.1, the specification states:

```
On a block-level, table-cell, table-caption or inline-block element whose content is
composed of inline-level elements, 'line-height' specifies the minimal height of line
boxes within the element. The minimum height consists of a minimum height above the
block's baseline and a minimum depth below it, exactly as if each line box starts with
a zero-width inline box with the block's font and line height properties (what TEX
calls a "strut").
```

  See section 2.1.54.

```
On an inline-level element, 'line-height' specifies the height that is used in the
calculation of the line box height (except for inline replaced elements, where the
height of the box is given by the 'height' property).
```

  See section 2.1.5.

7 Appendix E: Quirks Mode Emulation

In Windows® Internet Explorer® 9, when a document is displayed in IE9 Mode, the browser loads a different rendering engine than that it used in Windows® Internet Explorer® 8 and Windows® Internet Explorer® 7. Although the newer rendering engine is only used when Windows® Internet Explorer® detects that an HTML page has requested the highest level of support for standards, the same is not always true for child pages that might be loaded within **frame** and **iframe** elements. Because only one rendering engine can be active at a time, IE9 Mode also includes emulation for Quirks Mode.

7.1 How to trigger Quirks Mode emulation

Quirks Mode emulation is used in the following circumstances:

- A page in IE9 Mode loads a Quirks Mode HTML page in an **iframe**.
- A frameset in IE9 Mode loads Quirks Mode content in a **frame**.

Only content in child pages is rendered using Quirks Mode emulation. Windows® Internet Explorer® continues to render the containing document in IE9 Mode.

Quirks Mode emulation is not used when loading child pages that specify a standard <!DOCTYPE>, or those that use the `X-UA-Compatible` meta tag to specify support for Windows® Internet Explorer® 8, Windows® Internet Explorer® 9, or Edge Mode. These pages are rendered with IE9 Mode instead. For more information about how Internet Explorer selects Document Mode, see [MS-IEDOCO] section 2.1.2.

7.2 The effects of quirks mode emulation

In Quirks Mode emulation, the Document Object Model (DOM) exposes the same objects, properties, and methods as IE9 Mode.

When Quirks Mode emulation is triggered for a **frame** or **iframe**, Windows® Internet Explorer® 9 adjusts the rendering of the **frame** or **iframe** as follows:

- **Inline elements.** If the width or height of an inline element is set explicitly, the inline element becomes an inline-block.
- **Box sizing.** The default box sizing for Quirks Mode emulation is content-box. **<input>** and **<textarea>** elements are exceptions to this rule and default to box-sizing, with the exception of **<input>** elements of type **image**.
- **<body> Sizing.** By default the size of body fills the viewport minus the margin, border, and padding from the **<html>** and **<body>** elements.
- **Percentage height.** The % height of all elements is resolved against the *default* **<body>** height, except for elements contained within a table or an absolutely positioned element, in which case % height is resolved to 'auto'.
- **Percentage height and writing mode.** Percentage height resolves against the logical default **<body>** height, subject to the rules above. That is, if a page is rendered in a top-down, right-left direction then the % height of a contained element is resolved against the default physical *width* of the **<body>** element.
- **Percentage Table Cell Height.** When calculating the height of a cell with a specified value of 100%, the table row height is assumed to be 100% unless otherwise specified.

- **Default margins.** Default margins are ignored at the top and bottom of **<body>**, **<th>**, and **<td>** elements, subject to the following restrictions:

  - Explicit top-margins are not ignored.

  - Only the bottom margin of the last element is ignored, and only if it is not set explicitly.

- **<form> Margins** The **<form>** element has a default bottom margin of 1 em.

- **Hover.** Hover rules apply only to links.

- **Tables in paragraphs.** Paragraphs are allowed to contain tables.

- **Table font inheritance.** With the exception of font-family, by default table elements do not inherit font properties.

- **CSS parser**. In Quirks Mode emulation, unlike in actual Quirks Mode, CSS is parsed as in IE9 Mode. The following exceptions apply:

  - **Unitless value.** Unitless values are accepted as pixels wherever a dimension is expected (for example, "width: 50;" is interpreted as "width: 50px;"). This is true except as parameters to the CSS calc() function.

  - **Hexadecimal color values.** Unitless, hashless hex values are accepted as color values wherever a color is expected. Such hexadecimal values must be either three or six digits in length. Three-digit hexadecimal values are expanded to six digits by repeating digits (for example, #B0B becomes #BB00BB), as described here.

  - **Ambiguous values.** In cases where a unitless value is ambiguous, preference is given to interpreting the value as a length (decimal).

  - **Class and ID selectors.** Class and ID selectors are case-insensitive.

- **compatMode property.** The compatMode property returns "BackCompat".

- **Almost Standards Mode.** Inline elements contribute to line height only in specific circumstances. For more information, see section Appendix D: Almost Standards Mode.

- **Percentage Height of Immediate Children of Table Cells.** The percentage height of the immediate children of table cells is resolved against the height of the row minus the cell's vertical padding and border. In these cases the height of the row is calculated by treating percentage height applied to the immediate children of table cells as 'auto'.

- **List Item Markers.** The default value of **list-style-position** is "inside" if the list-item is outside a <**UL**> or <**OL**> element, and "outside" otherwise.

- **Default Image Borders.** Images with the align attribute specified will get a default right margin of 3px if the value of align is "left", or a default 3px left margin if the value of align is "right".

8 Change Tracking

This section identifies changes that were made to the [MS-ES5] protocol document between the February 2011 and March 2011 releases. Changes are classified as New, Major, Minor, Editorial, or No change.

The revision class **New** means that a new document is being released.

The revision class **Major** means that the technical content in the document was significantly revised. Major changes affect protocol interoperability or implementation. Examples of major changes are:

- A document revision that incorporates changes to interoperability requirements or functionality.
- An extensive rewrite, addition, or deletion of major portions of content.
- Changes made for template compliance.
- Removal of a document from the documentation set.

The revision class **Minor** means that the meaning of the technical content was clarified. Minor changes do not affect protocol interoperability or implementation. Examples of minor changes are updates to clarify ambiguity at the sentence, paragraph, or table level.

The revision class **Editorial** means that the language and formatting in the technical content was changed. Editorial changes apply to grammatical, formatting, and style issues.

The revision class **No change** means that no new technical or language changes were introduced. The technical content of the document is identical to the last released version, but minor editorial and formatting changes, as well as updates to the header and footer information, and to the revision summary, may have been made.

The changes made to this document are listed in the following table. For more information, please contact protocol@microsoft.com.

Section	Tracking number (if applicable) and description	Major change (Y or N)	Change Type
7.2 The effects of quirks mode emulation	Updated information on behavior of list-item markers in Quirks Emulation mode.	N	New content added.

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