

CSS Tutorial

- CSS HOME
- CSS Introduction
- CSS Syntax
- CSS Selectors
- CSS How To
- CSS Comments
- CSS Colors
- CSS Backgrounds
- CSS Borders
- CSS Margins
- CSS Padding
- CSS Height/Width
- CSS Box Model
- CSS Outline
- CSS Text
- CSS Fonts
- CSS Icons
- CSS Links
- CSS Lists
- CSS Tables
- CSS Display
- CSS Max-width
- CSS Position
- CSS Z-index
- CSS Overflow
- CSS Float
- CSS Inline-block
- CSS Align
- CSS Combinators
- CSS Pseudo-class
- CSS Pseudo-element
- CSS Opacity
- CSS Navigation Bar
- CSS Dropdowns
- CSS Image Gallery
- CSS Image Sprites
- CSS Attr Selectors
- CSS Forms
- CSS Counters
- CSS Website Layout
- CSS Units
- CSS Specificity
- CSS Important
- CSS Math Functions

CSS Advanced

- CSS Rounded Corners
- CSS Border Images
- CSS Backgrounds
- CSS Colors
- CSS Color Keywords
- CSS Gradients
- CSS Shadows
- CSS Text Effects
- CSS Web Fonts
- CSS 2D Transforms
- CSS 3D Transforms
- CSS Transitions
- CSS Animations
- CSS Tooltips
- CSS Style Images
- CSS Image Reflection
- CSS object-fit
- CSS object-position
- CSS Masking
- CSS Buttons
- CSS Pagination
- CSS Multiple Columns
- CSS User Interface
- CSS Variables
- CSS Box Sizing
- CSS Media Queries
- CSS MQ Examples
- CSS Flexbox

CSS Responsive

- RWD Intro
- RWD Viewport
- RWD Grnd View
- RWD Media Queries
- RWD Images
- RWD Videos
- RWD Frameworks
- RWD Templates

CSS Grid

- Grid Intro
- Grid Container
- Grid Item

CSS SASS

- SASS Tutorial

CSS Examples

- CSS Templates
- CSS Examples
- CSS Editor
- CSS Snippets
- CSS Quiz
- CSS Exercises
- CSS Bootcamp
- CSS Certificate

CSS References

- CSS Reference
- CSS Selectors
- CSS Functions
- CSS Reference Aural
- CSS Web Safe Fonts
- CSS Animatable
- CSS Units
- CSS PX-EM Converter
- CSS Colors
- CSS Color Values
- CSS Default Values
- CSS Browser Support

CSS Units

Previous

Next

CSS Units

CSS has several different units for expressing a length.

Many CSS properties take "length" values, such as `width`, `margin`, `padding`, `font-size`, etc.

**Length** is a number followed by a length unit, such as `10px`, `2em`, etc.

Example

Set different length values, using px (pixels):

```
h1 {
  font-size: 60px;
}

p {
  font-size: 25px;
  line-height: 50px;
}
```

Try it Yourself

**Note:** A whitespace cannot appear between the number and the unit. However, if the value is `0`, the unit can be omitted.

For some CSS properties, negative lengths are allowed.

There are two types of length units: **absolute** and **relative**.

Absolute Lengths

The absolute length units are fixed and a length expressed in any of these will appear as exactly that size.

Absolute length units are not recommended for use on screen, because screen sizes vary so much. However, they can be used if the output medium is known, such as for print layout.

Unit	Description	
cm	centimeters	Try it
mm	millimeters	Try it
in	inches (1in = 96px = 2.54cm)	Try it
px *	pixels (1px = 1/96th of 1in)	Try it
pt	points (1pt = 1/72 of 1in)	Try it
pc	picas (1pc = 12 pt)	Try it

\* Pixels (px) are relative to the viewing device. For low-dpi devices, 1px is one device pixel (dot) of the display. For printers and high resolution screens 1px implies multiple device pixels.

Relative Lengths

Relative length units specify a length relative to another length property. Relative length units scale better between different rendering mediums.

Unit	Description	
em	Relative to the font-size of the element (2em means 2 times the size of the current font)	Try it
ex	Relative to the x-height of the current font (rarely used)	Try it
ch	Relative to width of the "0" (zero)	Try it
rem	Relative to font-size of the root element	Try it
vw	Relative to 1% of the width of the viewport*	Try it
vh	Relative to 1% of the height of the viewport*	Try it
vmin	Relative to 1% of viewport's* smaller dimension	Try it
vmax	Relative to 1% of viewport's* larger dimension	Try it
%	Relative to the parent element	Try it

**Tip:** The em and rem units are practical in creating perfectly scalable layout!  
\* Viewport = the browser window size. If the viewport is 50cm wide, 1vw = 0.5cm.

Browser Support

The numbers in the table specify the first browser version that fully supports the length unit.

Length Unit	Chrome	Firefox	Safari	Edge	Opera
em, ex, %, px, cm, mm, in, pt, pc	1.0	3.0	1.0	1.0	3.5
ch	27.0	9.0	1.0	7.0	20.0
rem	4.0	9.0	3.6	4.1	11.6
vh, vw	20.0	9.0	19.0	6.0	20.0
vmin	20.0	12.0	19.0	6.0	20.0
vmax	26.0	16.0	19.0	7.0	20.0

Previous

Log in to track progress

Next

50% OFF

All Courses and Certificates

Shop now!

From 7th of July 2023 - 1st of August 2023

Does not include Bootcamps and Subscriptions

W3schools

COLOR PICKER



W3schools

Join our Mini CSS Bootcamp

★★★★★

"W3Schools Bootcamp is the best investment that I have ever made!"  
Student at W3Schools

Read more

## CSS Tutorial

- CSS HOME
- CSS Introduction
- CSS Syntax
- CSS Selectors
- CSS How To
- CSS Comments
- CSS Colors
- CSS Backgrounds
- CSS Borders
- CSS Margins
- CSS Padding
- CSS Height/Width
- CSS Box Model
- CSS Outline
- CSS Text
- CSS Fonts
- CSS Icons
- CSS Links
- CSS Lists
- CSS Tables
- CSS Display
- CSS Max-width
- CSS Position
- CSS Z-index
- CSS Overflow
- CSS Float
- CSS Inline-block
- CSS Align
- CSS Combinators
- CSS Pseudo-class
- CSS Pseudo-element
- CSS Opacity
- CSS Navigation Bar
- CSS Dropdowns
- CSS Image Gallery
- CSS Image Sprites
- CSS Attr Selectors
- CSS Forms
- CSS Counters
- CSS Website Layout

- CSS Units
- CSS Specificity
- CSS Important
- CSS Math Functions

## CSS Advanced

- CSS Rounded Corners
- CSS Border Images
- CSS Backgrounds
- CSS Colors
- CSS Color Keywords
- CSS Gradients
- CSS Shadows
- CSS Text Effects
- CSS Web Fonts
- CSS 2D Transforms
- CSS 3D Transforms
- CSS Transitions
- CSS Animations
- CSS Tooltips
- CSS Style Images
- CSS Image Reflection
- CSS object-fit
- CSS object-position
- CSS Masking
- CSS Buttons
- CSS Pagination
- CSS Multiple Columns
- CSS User Interface
- CSS Variables
- CSS Box Sizing
- CSS Media Queries
- CSS MQ Examples
- CSS Flexbox

## CSS Responsive

- RWD Intro
- RWD Viewport
- RWD Grid View
- RWD Media Queries
- RWD Images
- RWD Videos
- RWD Frameworks
- RWD Templates

## CSS Grid

- Grid Intro
- Grid Container
- Grid Item

## CSS SASS

- SASS Tutorial

## CSS Examples

- CSS Templates
- CSS Examples
- CSS Editor
- CSS Snippets
- CSS Quiz
- CSS Exercises
- CSS Bootcamp
- CSS Certificate

## CSS References

- CSS Reference
- CSS Selectors
- CSS Functions
- CSS Reference Aural
- CSS Web Safe Fonts
- CSS Animatable
- CSS Units
- CSS PX-EM Converter
- CSS Colors
- CSS Color Values
- CSS Default Values
- CSS Browser Support

- Python Tutorial
- W3.CSS Tutorial
- Bootstrap Tutorial
- PHP Tutorial
- Java Tutorial
- C++ Tutorial
- jQuery Tutorial

- W3.CSS Reference
- Bootstrap Reference
- PHP Reference
- HTML Colors
- Java Reference
- Angular Reference
- jQuery Reference

- Python Examples
- W3.CSS Examples
- Bootstrap Examples
- PHP Examples
- Java Examples
- XML Examples
- jQuery Examples

W3Schools is optimized for learning and training. Examples might be simplified to improve reading and learning. Tutorials, references, and examples are constantly reviewed to avoid errors, but we cannot warrant full correctness of all content. While using W3Schools, you agree to have read and accepted our terms of use, cookie and privacy policy.

Copyright 1999-2023 by Refsnes Data. All Rights Reserved.  
W3Schools is Powered by W3.CSS.

