

Units In CSS

px (pixels) is absolute unit.

em and rem, are not absolute, but relative units.

The value of relative units changes, based on external factors.

Pixels, points, and picas

CSS supports several absolute length units, the most common of which, and the most basic, is the pixel (px). Less common absolute units are mm (millimeter), cm (centimeter), in. (inch), pt (point—typographic term for 1/72nd of an inch), and pc (pica—typographic term for 12 points). Any of these units can be translated directly to another if you want to work out the math: 1 in. = 25.4 mm = 2.54 cm = 6 pc = 72 pt = 96 px. Therefore, 16 px is the same as 12 pt ($16 / 96 \times 72$). Designers are often more familiar with the use of points, where developers are more accustomed to pixels, so you may have to do some translation between the two when communicating with a designer.

Pixel is a slightly misleading name—a CSS pixel does not strictly equate to a monitor's pixel. This is notably the case on high-resolution (“retina”) displays. Although the CSS measurements can be scaled a bit, depending on the browser, the operating system, and the hardware, 96 px is usually in the ballpark of 1 physical inch onscreen, though this can vary on certain devices or with a user's resolution settings.

Ems and rems

Note : --- The ruleset specifies a font size of 16 px, which becomes the element's local definition for 1 em. Then the code uses ems to specify the padding of the element.

Using ems can be convenient when setting properties like padding , height , width , or border-radius because these will scale evenly with the element if it inherits different font sizes, or if the user changes the font settings.

```
<html>
<head>
<title>Relative Unit em</title>

<style>
.divStyle{
border:1px solid black;
font-size:16px;
padding:2em;
}
</style>
</head>

<body>
<div class="divStyle">
This is element has a padding in ems.
</div>
</body>
</html>
```