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# **Spacing**

Bootstrap includes a wide range of shorthand responsive margin, padding, and gap utility classes to modify an element's appearance.



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# Margin and padding #

Assign responsive-friendly margin or padding values to an element or a subset of its sides with shorthand classes. Includes support for individual properties, all properties, and vertical and horizontal properties. Classes are built from a default Sass map ranging from .25rem to 3rem.

Using the CSS Grid layout module? Consider using the gap utility instead.

#### **Notation**

Spacing utilities that apply to all breakpoints, from xs to xx1, have no breakpoint abbreviation in them. This is because those classes are applied from min-width: 0 and up, and thus are not bound by a media query. The remaining breakpoints, however, do include a breakpoint abbreviation.

The classes are named using the format {property}{sides}-{size} for xs and {property} {sides}-{breakpoint}-{size} for sm, md, lg, xl, and xxl.

Where property is one of:

• m - for classes that set margin

• p - for classes that set padding

Where sides is one of:

- t for classes that set margin-top or padding-top
- b for classes that set margin-bottom or padding-bottom
- s (start) for classes that set margin-left or padding-left in LTR, margin-right or padding-right in RTL
- e (end) for classes that set margin-right or padding-right in LTR, margin-left or padding-left in RTL
- x for classes that set both \*-left and \*-right
- y for classes that set both \*-top and \*-bottom
- blank for classes that set a margin or padding on all 4 sides of the element

Where size is one of:

- 0 for classes that eliminate the margin or padding by setting it to 0
- 1 (by default) for classes that set the margin or padding to \$spacer \* .25
- 2 (by default) for classes that set the margin or padding to \$spacer \* .5
- 3 (by default) for classes that set the margin or padding to \$spacer
- 4 (by default) for classes that set the margin or padding to \$spacer \* 1.5
- 5 (by default) for classes that set the margin or padding to \$spacer \* 3
- auto for classes that set the margin to auto

(You can add more sizes by adding entries to the \$spacers Sass map variable.)

## **Examples**

Here are some representative examples of these classes:

```
.mt-0 {
  margin-top: 0 !important;
}

.ms-1 {
  margin-left: ($spacer * .25) !important;
}

.px-2 {
  padding-left: ($spacer * .5) !important;
  padding-right: ($spacer * .5) !important;
}

.p-3 {
```

```
padding: $spacer !important;
}
```

# Horizontal centering

Additionally, Bootstrap also includes an .mx-auto class for horizontally centering fixed-width block level content—that is, content that has display: block and a width set—by setting the horizontal margins to auto.

Centered element

```
<div class="mx-auto p-2" style="width: 200px;">
  Centered element
</div>
```

# **Negative margin**

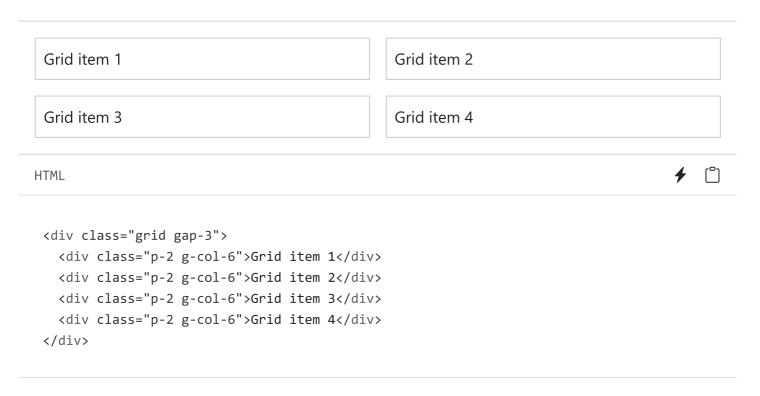
In CSS, margin properties can utilize negative values (padding cannot). These negative margins are **disabled by default**, but can be enabled in Sass by setting \$enable-negative-margins: true.

The syntax is nearly the same as the default, positive margin utilities, but with the addition of n before the requested size. Here's an example class that's the opposite of .mt-1:

```
.mt-n1 {
  margin-top: -0.25rem !important;
}
```

# Gap

When using display: grid or display: flex, you can make use of gap utilities on the parent element. This can save on having to add margin utilities to individual children of a grid or flex container. Gap utilities are responsive by default, and are generated via our utilities API, based on the \$spacers Sass map.



Support includes responsive options for all of Bootstrap's grid breakpoints, as well as six sizes from the properts map (0–5). There is no .gap-auto utility class as it's effectively the same as .gap-0.

#### row-gap

row-gap sets the vertical space between children items in the specified container.

Grid item 1	Grid item 2	
Grid item 3	Grid item 4	
HTML		<b>4</b> 🖺
<pre><div class="grid gap-0 row-&lt;/pre&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;pre&gt;&lt;div class=" g-col-6"="" p-2=""> <div class="p-2 g-col-6"></div></div></pre>		
<div class="p-2 g-col-6"></div>	Grid item 3	
<pre><div class="p-2 g-col-6"></div></pre>	Grid item 4	

# column-gap

</div>

column-gap sets the horizontal space between children items in the specified container.

Grid item 2

Grid item 3

Grid item 2

Grid item 4

HTML



```
<div class="grid gap-0 column-gap-3">
  <div class="p-2 g-col-6">Grid item 1</div>
  <div class="p-2 g-col-6">Grid item 2</div>
  <div class="p-2 g-col-6">Grid item 3</div>
  <div class="p-2 g-col-6">Grid item 4</div>
  </div>
```

#### **CSS**

### Sass maps

Spacing utilities are declared via Sass map and then generated with our utilities API.

scss/\_variables.scss

```
$spacer: 1rem;
$spacers: (
    0: 0,
    1: $spacer * .25,
    2: $spacer * .5,
    3: $spacer,
    4: $spacer * 1.5,
    5: $spacer * 3,
);
```

#### Sass utilities API

Spacing utilities are declared in our utilities API in scss/\_utilities.scss. <u>Learn how to use the utilities API.</u>

scss/\_utilities.scss



```
"margin": (
  responsive: true,
  property: margin,
  class: m,
  values: map-merge($spacers, (auto: auto))
),
"margin-x": (
  responsive: true,
  property: margin-right margin-left,
  class: mx,
  values: map-merge($spacers, (auto: auto))
),
"margin-y": (
  responsive: true,
  property: margin-top margin-bottom,
  class: my,
  values: map-merge($spacers, (auto: auto))
),
"margin-top": (
 responsive: true,
  property: margin-top,
 class: mt,
  values: map-merge($spacers, (auto: auto))
),
"margin-end": (
  responsive: true,
  property: margin-right,
  class: me,
  values: map-merge($spacers, (auto: auto))
),
"margin-bottom": (
  responsive: true,
  property: margin-bottom,
  class: mb,
  values: map-merge($spacers, (auto: auto))
),
"margin-start": (
 responsive: true,
  property: margin-left,
  class: ms,
  values: map-merge($spacers, (auto: auto))
),
// Negative margin utilities
"negative-margin": (
  responsive: true,
  property: margin,
  class: m,
  values: $negative-spacers
```

```
),
"negative-margin-x": (
 responsive: true,
 property: margin-right margin-left,
 class: mx,
 values: $negative-spacers
),
"negative-margin-y": (
 responsive: true,
 property: margin-top margin-bottom,
 class: my,
 values: $negative-spacers
),
"negative-margin-top": (
 responsive: true,
 property: margin-top,
 class: mt,
 values: $negative-spacers
),
"negative-margin-end": (
 responsive: true,
 property: margin-right,
 class: me,
 values: $negative-spacers
),
"negative-margin-bottom": (
 responsive: true,
 property: margin-bottom,
 class: mb,
 values: $negative-spacers
),
"negative-margin-start": (
 responsive: true,
 property: margin-left,
 class: ms,
 values: $negative-spacers
),
// Padding utilities
"padding": (
 responsive: true,
 property: padding,
 class: p,
 values: $spacers
),
"padding-x": (
 responsive: true,
 property: padding-right padding-left,
 class: px,
 values: $spacers
```

```
),
"padding-y": (
  responsive: true,
  property: padding-top padding-bottom,
  class: py,
  values: $spacers
),
"padding-top": (
  responsive: true,
  property: padding-top,
  class: pt,
  values: $spacers
),
"padding-end": (
  responsive: true,
  property: padding-right,
  class: pe,
  values: $spacers
),
"padding-bottom": (
  responsive: true,
  property: padding-bottom,
  class: pb,
  values: $spacers
),
"padding-start": (
  responsive: true,
  property: padding-left,
 class: ps,
 values: $spacers
),
// Gap utility
"gap": (
  responsive: true,
  property: gap,
  class: gap,
 values: $spacers
),
"row-gap": (
  responsive: true,
  property: row-gap,
  class: row-gap,
  values: $spacers
),
"column-gap": (
  responsive: true,
  property: column-gap,
  class: column-gap,
```

```
values: $spacers
),
```

# B Bootstrap

Designed and built with all the love in the world by the Bootstrap team with the help of our contributors.

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Currently v5.3.0.

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