

# stroke()

Sets the color used to draw points, lines, and the outlines of shapes.

Calling `stroke(255, 165, 0)` or `stroke('orange')` means all shapes drawn after calling `stroke()` will be outlined with the color orange. The way these parameters are interpreted may be changed with the `colorMode()` function.

The version of `stroke()` with one parameter interprets the value one of three ways. If the parameter is a `Number`, it's interpreted as a grayscale value. If the parameter is a `String`, it's interpreted as a CSS color string. A `p5.Color` object can also be provided to set the stroke color.

The version of `stroke()` with two parameters interprets the first one as a grayscale value. The second parameter sets the alpha (transparency) value.

The version of `stroke()` with three parameters interprets them as RGB, HSB, or HSL colors, depending on the current `colorMode()`.

The version of `stroke()` with four parameters interprets them as RGBA, HSBA, or HSLA colors, depending on the current `colorMode()`. The last parameter sets the alpha (transparency) value.

## Examples



```
▶ function setup() {
  createCanvas(100, 100);

  background(200);

  // A grayscale value.
  strokeWeight(4);
  stroke(51);
  square(20, 20, 60);

  describe('A white square with a dark charcoal gray outline.');
}
```

```
▶ function setup() {
  createCanvas(100, 100);

  background(200);

  // R, G & B values.
  stroke(255, 204, 0);
  strokeWeight(4);
  square(20, 20, 60);

  describe('A white square with a yellow outline.');
}
```

```
▶ function setup() {
  createCanvas(100, 100);

  background(200);

  // Use HSB color.
  colorMode(HSB);

  // H, S & B values.
  strokeWeight(4);
  stroke(255, 204, 100);
  square(20, 20, 60);

  describe('A white square with a royal blue outline.');
}
```

```
▶ function setup() {
  createCanvas(100, 100);

  background(200);

  // A CSS named color.
  stroke('red');
  strokeWeight(4);
  square(20, 20, 60);

  describe('A white square with a red outline.');
}
```

```
▶ function setup() {
  createCanvas(100, 100);

  background(200);

  // Three-digit hex RGB notation.
  stroke('#fae');
  strokeWeight(4);
  square(20, 20, 60);

  describe('A white square with a pink outline.');
}
```

```
▶ function setup() {
  createCanvas(100, 100);

  background(200);

  // Six-digit hex RGB notation.
  stroke('#222222');
  strokeWeight(4);
  square(20, 20, 60);

  describe('A white square with a black outline.');
}
```

```
▶ function setup() {
  createCanvas(100, 100);

  background(200);

  // Integer RGB notation.
  stroke('rgb(0, 255, 0)');
  strokeWeight(4);
  square(20, 20, 60);

  describe('A white square with a bright green outline.');
}
```

```
▶ function setup() {
  createCanvas(100, 100);

  background(200);

  // Integer RGBA notation.
  stroke('rgba(0, 255, 0, 0.25)');
  strokeWeight(4);
  square(20, 20, 60);

  describe('A white square with a soft green outline.');
}
```

```
▶ function setup() {
  createCanvas(100, 100);

  background(200);

  // Percentage RGB notation.
  stroke('rgb(100%, 0%, 10%)');
  strokeWeight(4);
  square(20, 20, 60);

  describe('A white square with a red outline.');
}
```

```
▶ function setup() {
  createCanvas(100, 100);

  background(200);

  // Percentage RGBA notation.
  stroke('rgba(100%, 0%, 100%, 0.5)');
  strokeWeight(4);
  square(20, 20, 60);

  describe('A white square with a dark fuchsia outline.');
}
```

```
▶ function setup() {
  createCanvas(100, 100);

  background(200);

  // A p5.Color object.
  stroke(color(0, 0, 255));
  strokeWeight(4);
  square(20, 20, 60);

  describe('A white square with a blue outline.');
}
```

## Syntax

```
stroke(v1, v2, v3, [alpha])
```

```
stroke(value)
```

```
stroke(gray, [alpha])
```

```
stroke(values)
```

```
stroke(color)
```

## Parameters

v1	Number: red value if color mode is RGB or hue value if color mode is HSB.
v2	Number: green value if color mode is RGB or saturation value if color mode is HSB.
v3	Number: blue value if color mode is RGB or brightness value if color mode is HSB.
alpha	Number: alpha value, controls transparency (0 - transparent, 255 - opaque).
value	String: a color string.
gray	Number: a grayscale value.
values	Number[]: an array containing the red, green, blue, and alpha components of the color.
color	p5.Color: the stroke color.

This page is generated from the comments in `src/color/setting.js`. Please feel free to edit it and submit a pull request!

## Related References

[background](#)

Sets the color used for the background of the canvas.

[beginClip](#)

Starts defining a shape that will mask any shapes drawn afterward.

[clear](#)

Clears the pixels on the canvas.

[clip](#)

Defines a shape that will mask any shapes drawn afterward.