stroke() and noStroke()

6 min

Shapes have another color as well—stroke!

The stroke is the color used to draw lines or the borders around shapes. All the shapes we have seen so far are drawn with a default stroke color of black. You can set the stroke color with the stroke() function the same way we did for the fill() function. It takes a color as input and must be called before drawing the shape.

```
stroke('red');
rect(width/2, height/2, 100);
```

The thickness of strokes can be set with the strokeWeight() function.

The strokeWeight() function takes a numeric value as input for the width in pixels.

```
// Default
strokeWeight(1);
line(20, 20, 20, 120);

// Thicker
strokeWeight(5);
line(70, 20, 70, 120);

// Very Thick
strokeWeight(10);
line(100, 20, 100, 120);
```

You can disable the stroke from being drawn by calling the nostroke() function.

```
noStroke();
rect(width/2, height/2, 100);
```

Instructions

1. In the n5 is sketch to the right, set the top-left line's stroke color to green in

In the p5.js sketch to the right, set the top-left line's stroke color to green in RGB notation by calling the stroke() function before the shape is drawn.
Hint

Make sure to call the stroke() function before the shape is drawn.
The stroke() function can take RGB values as arguments like below:

stroke(redValue, greenValue, blueValue);

2.

A single pixel is too hard to see! Set the top-right point's stroke weight to 100 pixels.

Hint

Set the stroke weight with the strokeWeight() function before the point() function.

For example, to set the stroke weight to 10 pixels, your code will look like this:

strokeWeight(10);

3.

Now all the shapes have a stroke of 100 pixels! Return top-left line's stroke weight to 1 pixel.

Hint

Make sure to set the stroke weight using the strokeWeight() function before the line() function is called.

4.

Let's change the triangle's stroke setting. Set the bottom-left triangle's stroke color to 'red' and stroke weight to 5 pixels.

Hint

Set both the stroke color and the stroke weight before the shape is drawn.

5.

Lastly, set the bottom-right circle to have no stroke.

Hint

Remove the stroke by calling nostroke() before the shape is drawn.

sketch.js

```
let shapeWidth = 100;

function setup() {
   createCanvas(400, 400);

   background(200);
}

function draw() {
// TODO: Set the top-left line stroke to green
   strokeWeight(1);
```

```
stroke(0, 255, 0);
  line(width/2 - shapeWidth,
        shapeWidth/2,
       width/2 - shapeWidth,
        height/2 - shapeWidth/2);
// TODO: Set the top-right point weight to 100 pixels
  strokeWeight(100);
  point(width/2 + shapeWidth,
        height/2 - shapeWidth);
// TODO: Set the bottom-left triangle to stroke color to red and the stroke weight of 5
  strokeWeight(5);
  stroke('red');
  triangle(shapeWidth/2,
          height/2 + shapeWidth/2,
           shapeWidth/2, height - shapeWidth/2,
          width/2 - shapeWidth/2,
          height/2 + shapeWidth/2);
// TODO: Set the bottom-right circle to a transparent stroke
  noStroke();
  circle(width/2 + shapeWidth,
        height/2 + shapeWidth,
         shapeWidth);
```

