

Programming In Processing

Class #2: 2/13/08

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What did we cover last week?

(Words in bold in the examples should be replaced by NUMBERS.

Words in italics should be replaced by NAMES.)

```
void setup() {  
  size(width, height);  
  colorName = color(redValue, greenValue, blueValue);  
  background(colorName);  
}  
  
void draw(){  
  rect(xStart, yStart, width, height);  
  ellipse(xStart, yStart, width, height);  
}
```

What are some common colors?

Black: (0, 0, 0)

White: (255, 255, 255)

Red: (255, 0, 0)

Green: (0, 255, 0)

Blue: (0, 0, 255)

Cyan: (0, 255, 255)

Pink: (255, 0, 255)

Yellow: (255, 255, 0)

How do you change the fill color of a shape?

Use the fill() command, which takes a color as an argument.

```
void draw(){  
  fill(colorName);  
  // draw shape here  
}
```

How do you change the outline color of a shape?

Use the stroke() command, which takes a color as an argument.

```
void draw(){  
  stroke(colorName);  
  // draw shape here  
}
```

How do you change the thickness of a shape's outline?

Before using the `stroke()` command, use the `strokeWeight` command with some number to set the thickness of your shape's outline. (The normal `strokeWeight` is 1.)

```
void draw(){
  strokeWeight(5);      // thick outline
  // draw shape here
  strokeWeight(.8);    // thin outline
  // draw shape here
}
```

How do you draw triangles?

Triangles can be specified by three sets of x, y points; (x1, y1) for the first vertex, (x2, y2) for the second vertex, and (x3, y3) for the third vertex.

```
void draw(){
  triangle(x1, y1, x2, y2, x3, y3);
}
```

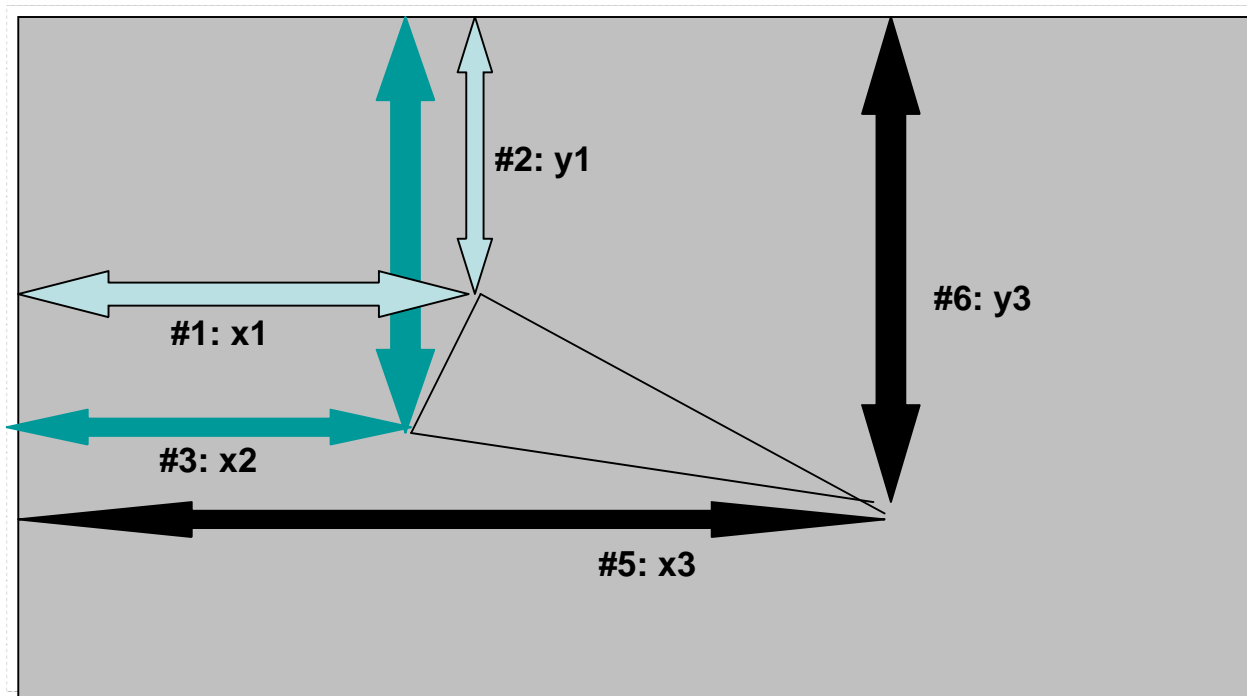
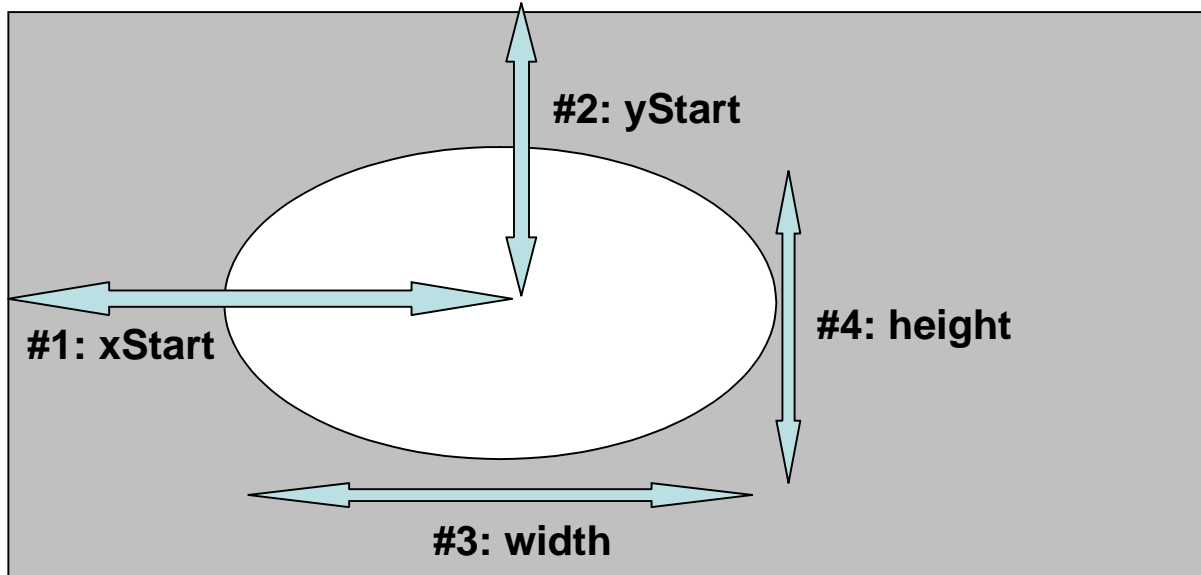
How do you draw custom shapes?

You start a shape with the `beginShape()` command and end it with the `endShape` command. In between, you can create vertices (points on the edge of your shape) by using the `vertex` command with two arguments: x and y.

```
void draw(){
  beginShape();
  vertex(x1, y1);
  vertex(x2, y2);
  vertex(x3, y3);
  endShape();
}
```

By using `endShape(CLOSE)` instead of `endShape()`, you can close the edge of your shape.

```
void draw(){
  beginShape();
  vertex(x1, y1);
  vertex(x2, y2);
  vertex(x3, y3);
  endShape(CLOSE);
}
```



```
triangle(x1, y1, x2, y2 , x3, y3);
```