

# **Bootcamp Day 3**

Images, Simple Animation, Fonts

**How to draw a rectangle?**

# How to draw a rectangle?

```
rect(0, 0, 200, 100);
```

**How to draw an image?**

# How to draw an image?

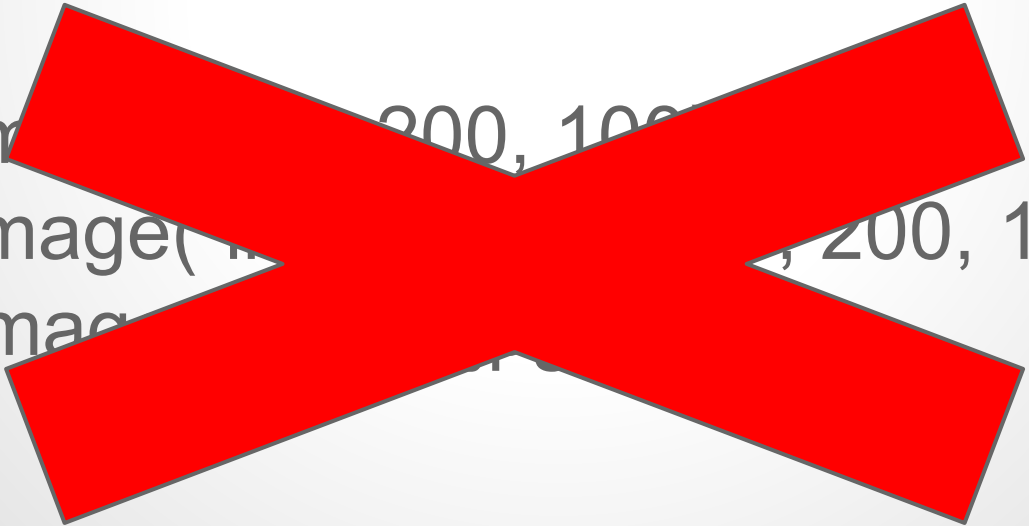
A. `image(0, 0, 200, 100);`

B. `image("image.jpg", 0, 0, 200, 100);`

C. `image("image.jpg", 0, 0);`

# How to draw an image?

- A. image( ... , 200, 100);
- B. image( ... , 200, 100);
- C. image( ... , 200, 100);

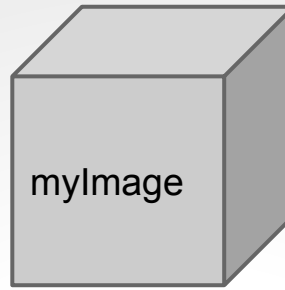


# **Image**

PImage

```
PImage myImage;
```

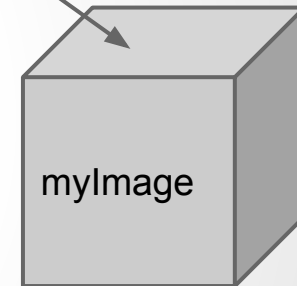
```
//Declaring a variable of type Image
```



```
img.jpg → 01010  
          11011  
          00100
```

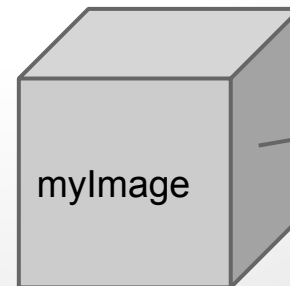
```
myImage = loadImage("image.jpg");
```

```
//Make a new instance of PImage by loading an image file
```

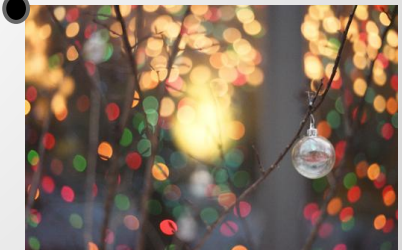


```
image(myImage, 0, 0);
```

```
//Draw an image to the screen at (0, 0)
```



```
(0,0)
```





# Images

```
// declare
```

```
PImage myImage;
```

```
void setup(){
```

```
// load (in setup)
```

```
myImage = loadImage("filename.jpg");
```

```
}
```

```
void draw(){
```

```
// draw it at 0,0 (in draw)
```

```
image(myImage, 0, 0);
```

```
}
```

# **Example 1**

Image Display

# Image Property

```
image(myImage, mouseX, mouseY,  
      width/2, height/2);  
      tint(a, b, c, d);
```

# **Example 2**

Image Properties

# **Animation I**

replace numbers with variables

# **Example 3**

Image Increment

# **Animation II**

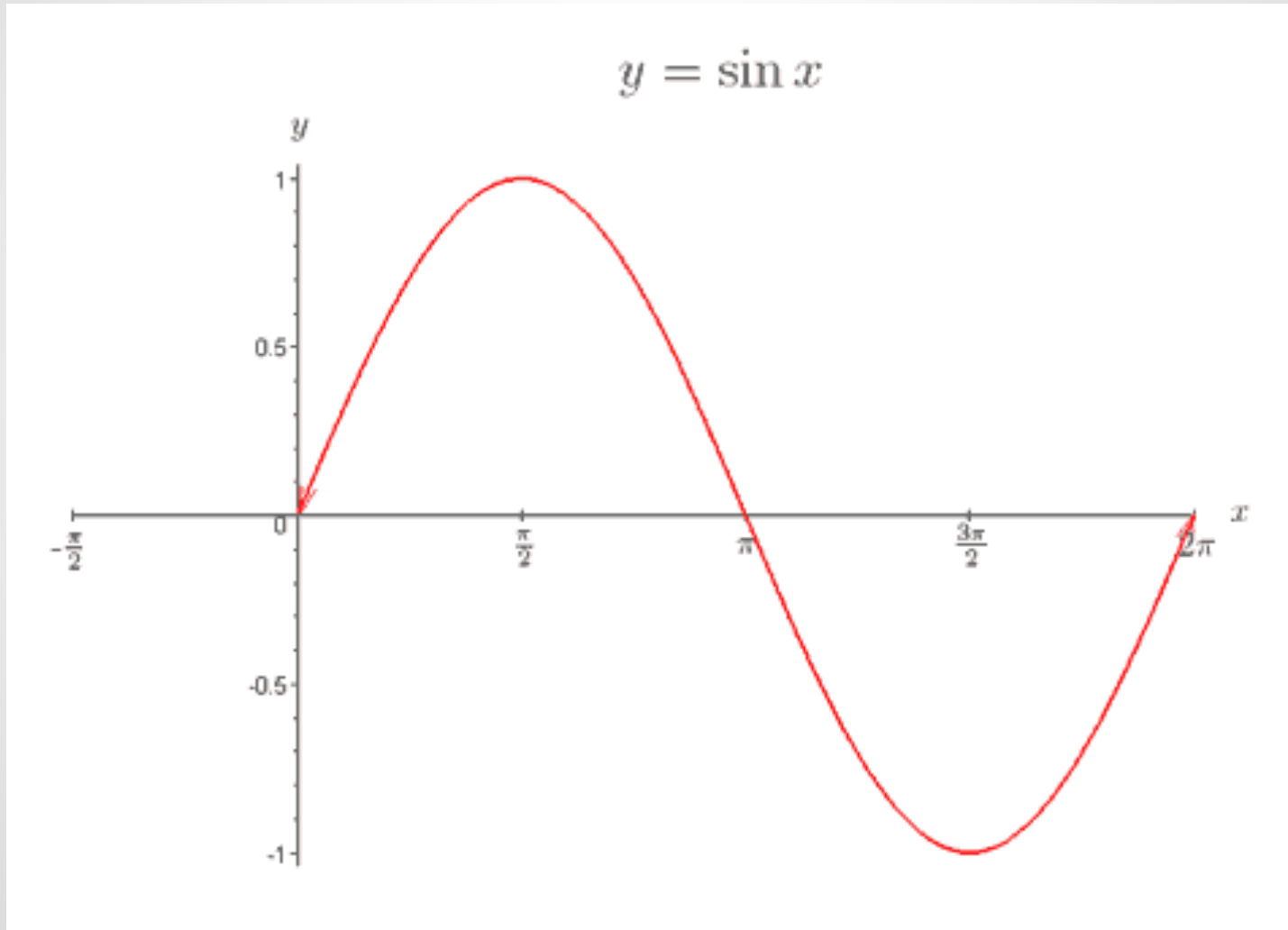
trigonometry function

# Trigonometry

$\sin()$ ;  $\cos()$ ;



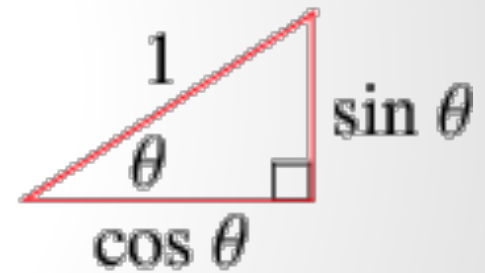
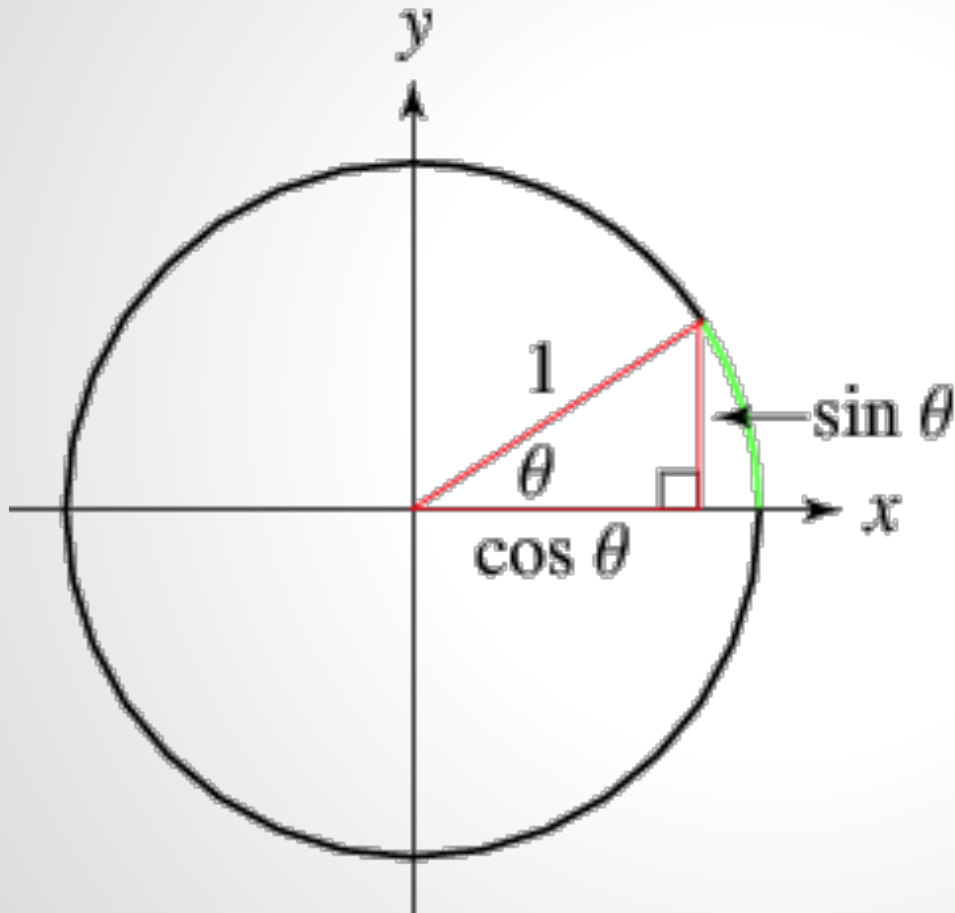
# Sine Function



# **Example 4**

heart pounding

# Trigonometric Functions



# **Example 5**

moon revolvemement

# **Text Fonts**

PFont

# Fonts

```
// declare
```

```
PFont awesomeFont;
```

```
void setup(){
```

```
// load (in setup)
```

```
awesomeFont = loadFont("Arial-14.vlw");
```

```
}
```

```
void draw(){
```

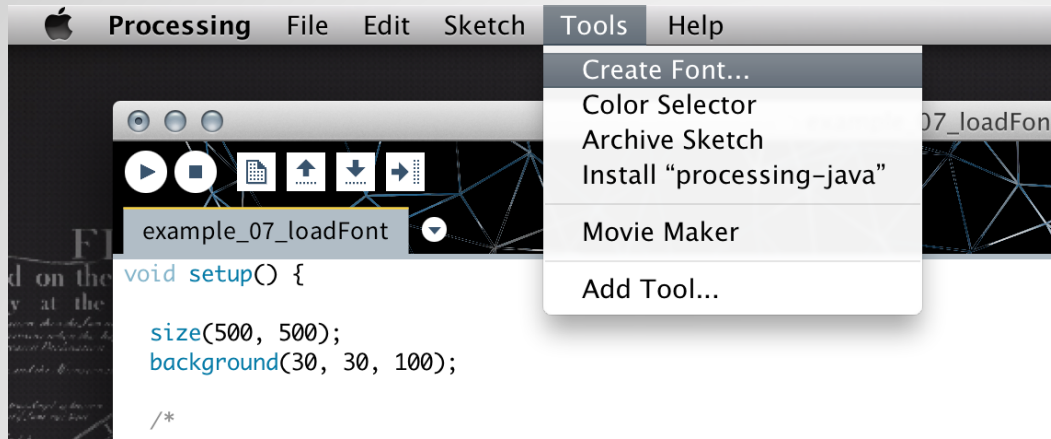
```
// set which font to use. draw it at 0,0 (in draw)
```

```
textFont(awesomeFont);
```

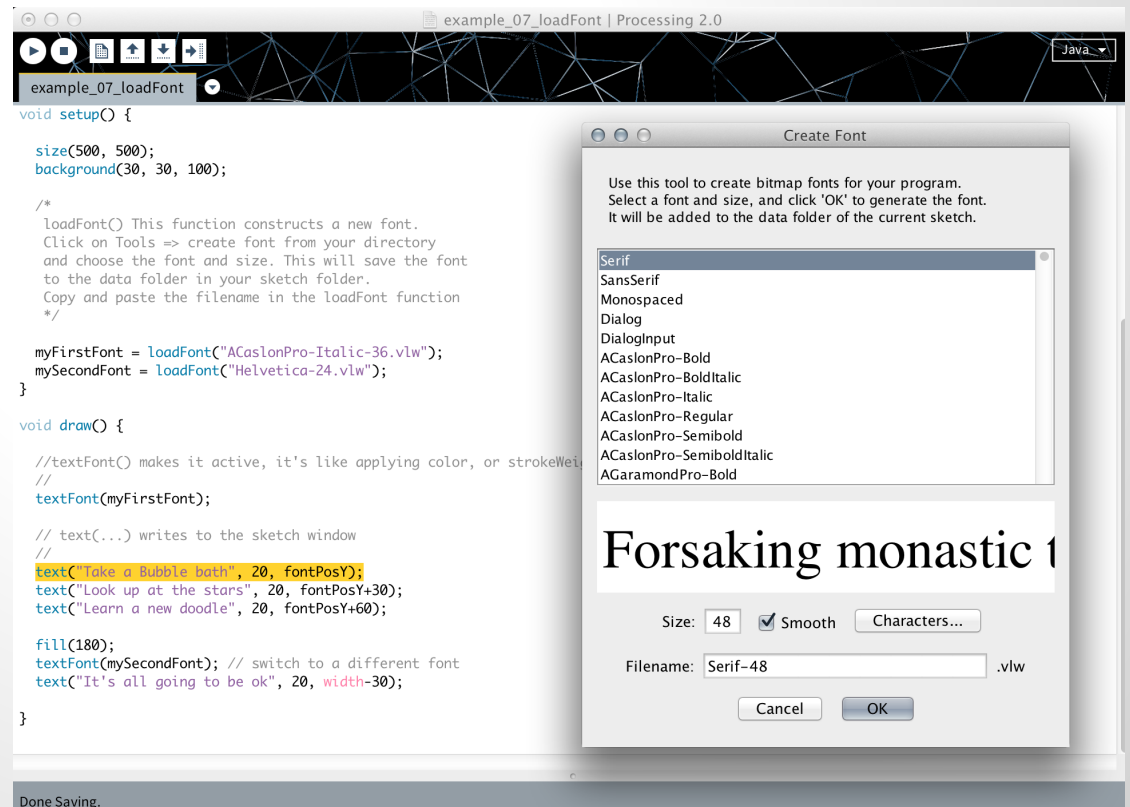
```
text("Hello!", 0, 0);
```

```
}
```

1.



2.



```
myFont = createFont("Helvetica", 24, true);
```



# **Example 6**

Text Display

# **Example 7**

Text Increment

# **Example 8**

Text Trigonometry Movement

# Assignment

Ideas:

- Make a GIF with Image and Text whether it is a gift card, proposal card, or simple fun card or
- Do some fancy patterns using Image & Text

Note:

Try to use 3 new functions/keywords that we haven't touched in class. Find them in [reference](#) or google "how to rotate in processing" / "rotate processing"

# **Example 9**

an example of what a GIF would be