

# PROCESSING CHEAT SHEET

Content for this cheat sheet provided from <http://www.surattack.com>  
Additional resources can be found at: <http://www.processing.org/>

## Structure

```
void setup()  
{ // runs only once.  
}  
void draw()  
{ // runs repeatedly.  
}
```

## Comments/Debug

```
/* this is a multiline  
comment. nothing between  
here will be run or  
executed */  
// this is a single  
// line comment
```

## Data \ Variable Types

```
void (null return)  
int (integer -32,768 to 32,767)  
float (floating point / decimal numbers)  
String (array of characters)
```



## Basic Logic

```
If(mathematical statement)  
{  
  //true statement code here  
}  
else  
{  
  //false statement code here  
}
```

## Basic Functions

```
size(width, height);  
Sets main window size in pixels.  
background(color);  
Sets window background color..  
frameRate(fps);  
Sets the applications FPS.  
print(string);  
Writes a string to the Console.  
println(string);  
Writes a string to the Console with a  
CRLF.
```

```
delay(milliseconds);  
Places a wait or delay in  
milliseconds.
```

## Global Variables

```
width: Returns sketch's width in pixels.  
height: Returns sketch's height in  
pixels  
mouseX, mouseY: Returns the  
current mouse pointer's X or Y axis  
coordinate  
pmouseX, pmouseY: Returns  
previous mouse pointer's X or Y axis  
coordinate  
frameCount: Return's sketch's  
current frame.  
frameRate: Returns sketch's current  
FPS.
```

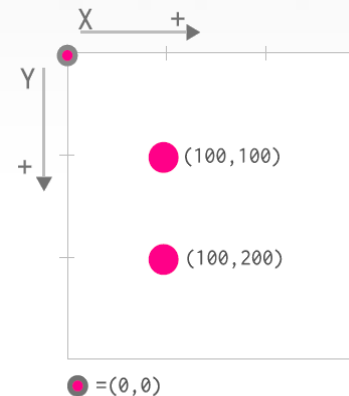
## Other shapes

```
point(x1, y1);  
triangle(x1, y1, x2, y2,  
x3, y3);  
quad(x1, y1, x2, y2, x3,  
y3, x4, y4);
```

## Shapes Border, Stroke, & Fill

```
fill(red,green,blue);  
Sets the filling color for next shape to draw  
0-255.  
noFill();  
Disables filling for the next shape.  
stroke(Red,Green,Blue);  
Sets the stroke/border color for next shape  
to draw 0-255.  
noStroke();  
Disables border for the next shape as well  
as lines.
```

## Coordinate System

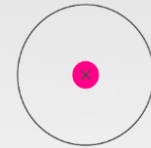


Top left corner of each sketch is the (0,0) point. That axis changes when we make use of the `translate()` function.

Minimum measurement unit in a computer screen is a **Pixel**.

## Basic Geometry

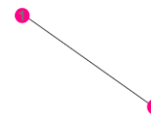
Anchor point



```
ellipse(x,y, w,h);  
Draws an ellipse centered in position (x,y)  
and with size "width"(w) and "height"(h).
```



```
rect(x, y, w, h);  
Draws a rect anchored at the top left  
corner, in position (x, y) and with a size  
"width" (w) and "height" (h).
```



```
line(x1, y1, x2, y2);  
Draws a line from (x1, y1) to (x2, y2)
```

## Time & Date

```
day();  
Returns the numeric day of the  
month.  
hour();  
Returns the current hour.  
minute();  
Returns the current minute.  
second();  
Returns the current second.
```