

# Cheat Sheet

## Shapes

rect(x, y, w, h)

Draw a rectangle

ellipse(x, y, w, h)

Draw an ellipse

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

Draw a triangle

line(x1, y1, x2, y2)

Draw a line

point(x, y)

Draw a point

arc(x, y, w, h, start, stop)

Draw an arc

bezier(x1, y1, cx1, cy1, cx2, cy2, x2, y2)

Draw a bezier curve

quad(x1, y1, x2, y2, x3, y3, x4, y4)

Draw any quadrilateral

image(image, x, y)

Display an image

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## Coloring

background(r, g, b)

Set the background color

fill(r, g, b)

Set the fill color for shapes

noFill()

Turn off fill for shapes

stroke(r, g, b)

Set the outline color for shapes

strokeWeight(thickness)

Change the thickness of lines and outlines

noStroke()

Turn off outlines for shapes

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color(r, g, b)

Store a color in a variable

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## Text

text(text, x, y)

Draw some text

textFont(font, size)

Changes the font of text

textSize(size)

Change the size of text

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## Mouse

mouseX, mouseY

Using the coordinates of the mouse

mouseIsPressed

True if mouse is being pressed, false otherwise

var mouseClicked = function() { };

Called when mouse is clicked

var mouseMoved = function() { };

Called when mouse is moved

var mousePressed = function() { };

Called when mouse is pressed

var mouseReleased = function() { };

Called when mouse is released

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## Keyboard

var keyPressed = function() { };

Called when a key is pressed

keyCode

Number representing which key is pressed

keyIsPressed

True if a key is being pressed, false otherwise

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## Math

random(low, high)

Generate a random number

dist(x1, y1, x2, y2)

Calculates the distance between two points

abs(num)

Take the absolute value of a number

log(num)

Take the logarithm of a number

pow(num, exponent)

Raise a number to an exponent

cos(deg)

Take the cosine of an angle

sin(deg)

Take the sin of an angle

tan(deg)

Take the tangent of an angle

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## Programming Syntax

var drawWinston = function() { };

Define a new function

if (x < 20) { ... }

Only run code if a certain condition is true

while (x < 250) { ... }

Only run code while a certain condition is true

for (var i = 0; i < 8; i += 1) { }

Repeat code a fixed number of times

var array = [0, 1, 2, 3, 4];

Make an array of 5 numbers

debug(arg1, arg2, ...)

Print to your browser's developer console

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