Problem Set 1

Notes

(1) You will need to consult the p5.js reference in order to solve these problems.

Link to the reference: https://p5js.org/reference/

(2) Experimenting with code will help you learn.

A place to experiment with code: https://editor.p5js.org/

createCanvas()

* If you want to create canvas with width equal 400 and height equal 300, what code should you write?

_____

point()

* What code do you write to draw a point at the top-left corner of the canvas?

_____

* Assume the size of the canvas is 101x101. What is the x-coordinate and what is the y-coordinate for the point located at the center of the canvas?

point(____, ____)

line()

* What's the meaning of each number in line(30, 20, 85, 75)?

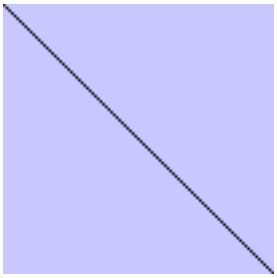
_____

_____

_____

_____

* Assume the size of the canvas is 101x101. What are the numbers for the diagonal line?



line(____, ____, ____, ____)

* Assume the size of the canvas is 101x101. What are the numbers for the vertical line?

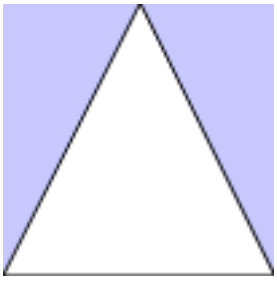
line(____, ____, ____, ____)

* Assume the size of the canvas is 101x101. What are the numbers for the horizontal line?

line(____, ____, ____, ____)

triangle()

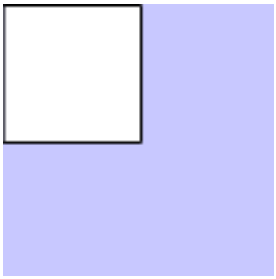
* Assume the size of the canvas is 101x101. What are the numbers for the white triangle?



triangle(____, ____, ____, ____, ____, ____)

rect()

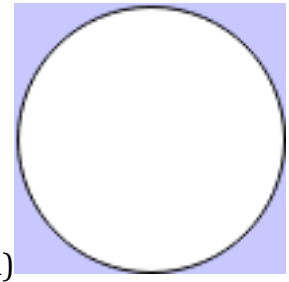
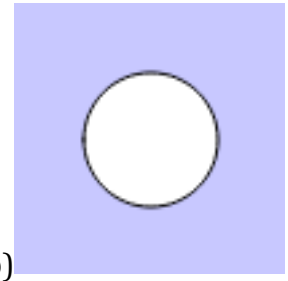
* Assume the size of the canvas is 101x101. What are the numbers the white rectangle?



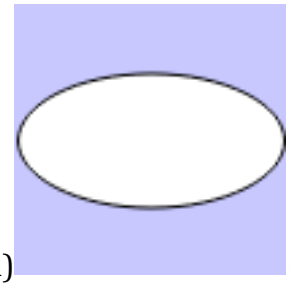
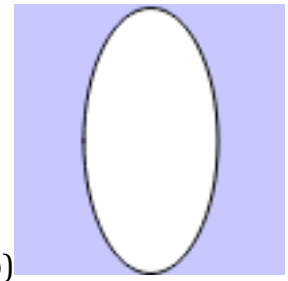
rect(____, ____, 51, 51)

ellipse()

* Assume the size of the canvas is 101x101. Which one will ellipse(51,51,99) draw?

(a)  (b) 

* Assume the size of the canvas is 101x101. Which one will ellipse(51,51,50,99) draw?

(a)  (b) 

* ellipse(51,51,100) draws a circle on the canvas. What's the radius of the circle?

_____

* ellipse(51,51,100) draws a circle on the canvas. What's the diameter of the circle?

_____

color()

* What are the numbers for red?

color(____, ____, ____)

* What's the name of the color(0,255,0)?

_____

* How will you describe the differences between color(0,0,100) and color(0,0,200)?

_____

_____

* What does RGB stand for?

_____

* How will you describe the differences between color(255,255,0,50) and

color(255,255,0,255)?

_____

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* Is color(40,80,120,255) fully transparent or opaque?

_____

* What are the numbers for yellow?

color(____, ____, ____)

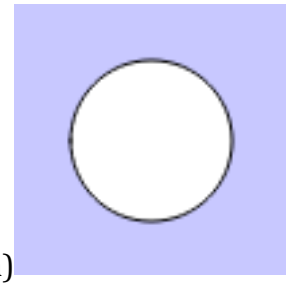
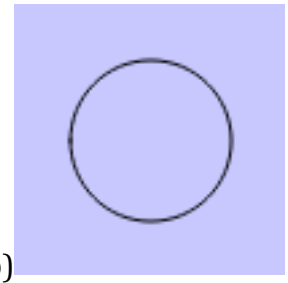
background()

* What's the code for making a black background?

_____

noFill()

* What's the difference between (a) and (b)?

(a)  (b) 

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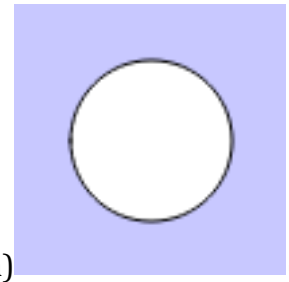
noStroke()

* What's the difference between (a) and (b)?

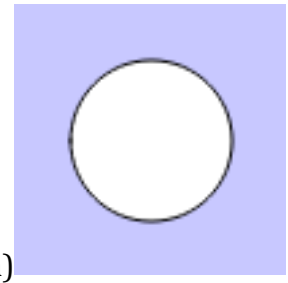
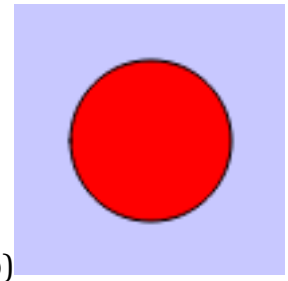
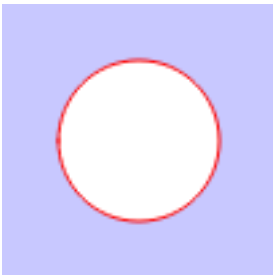
(a)  (b)

_____

_____

fill(), stroke()

* Compare the following circles.

(a)  (b)  (c) 

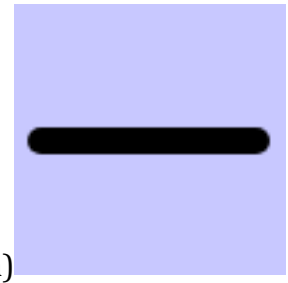
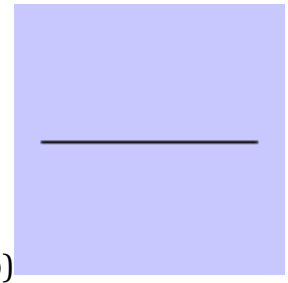
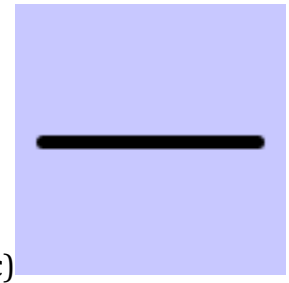
What code can turn (a) into (b)?

_____

What code can turn (a) into (c)?

_____

strokeWeight()

(a)  (b)  (c) 

Which is the line that has a weight of 10? _____

Which is the line that has a weight of 5? _____

Which is the line that has a weight of 1? _____