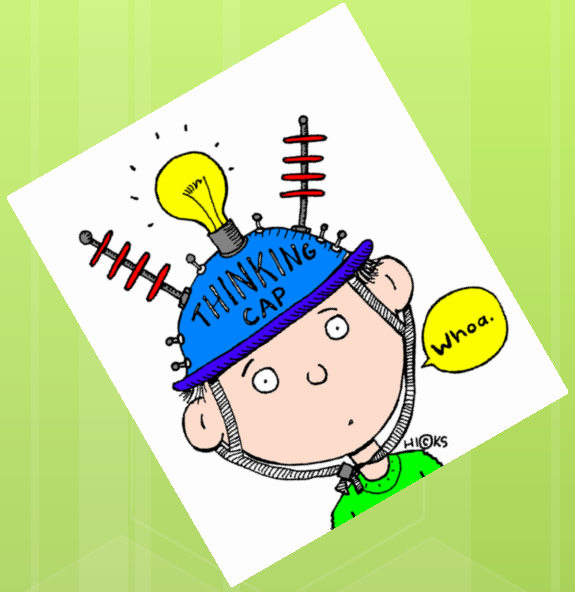
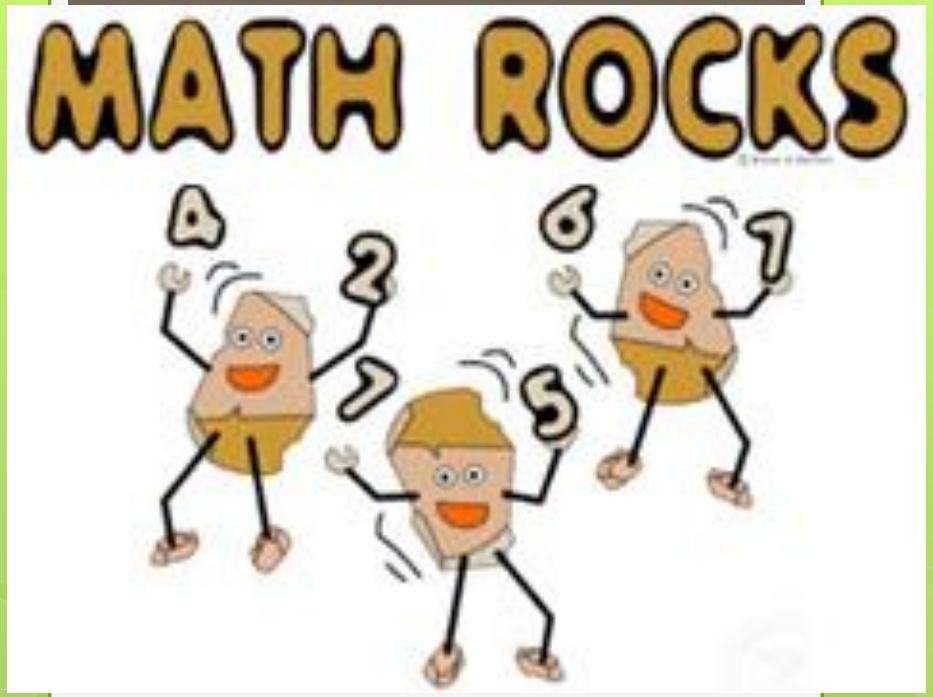




Unit 10 Review

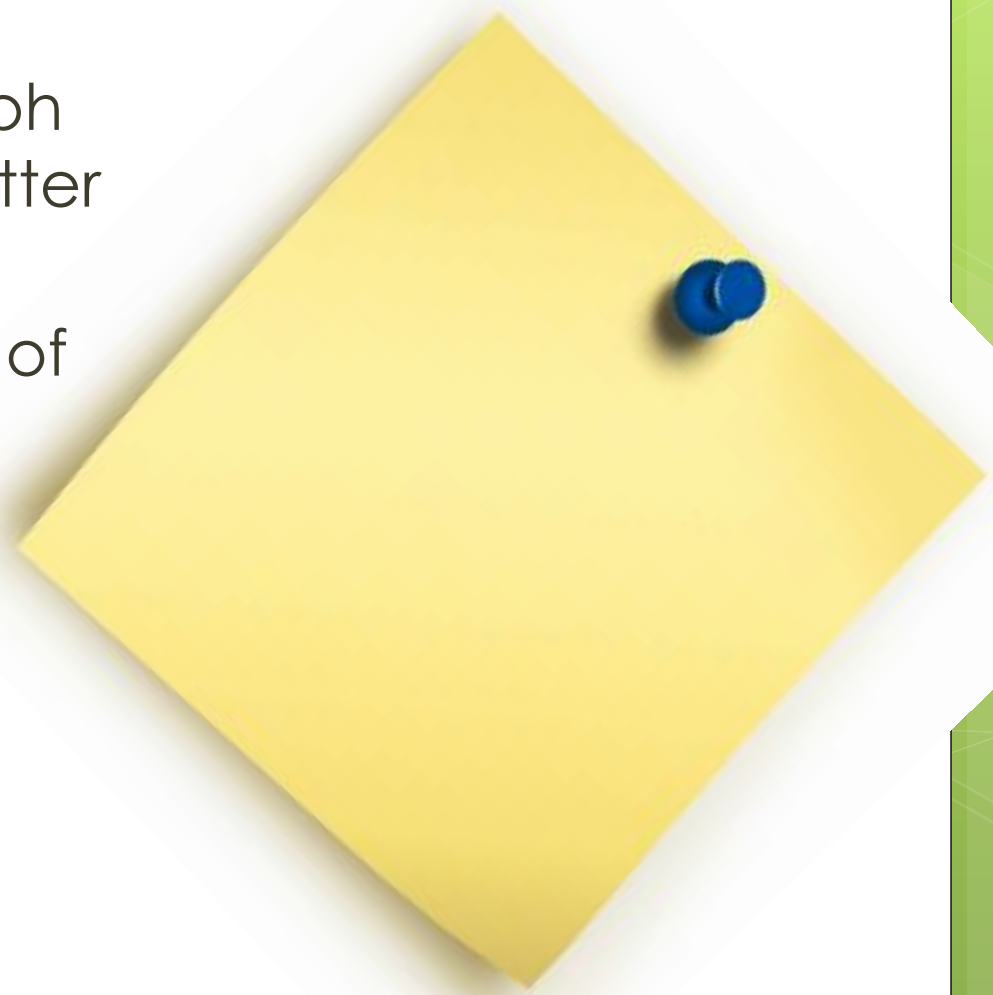
While you wait:

Green check if you completed all missing assignments:

Unit 7 Test
Unit 8 Test
Unit 9 quiz
Unit 9 Test

Sticky Note Question:

- Is there a certain graph that displays data better than others?
- What can each type of graph show?

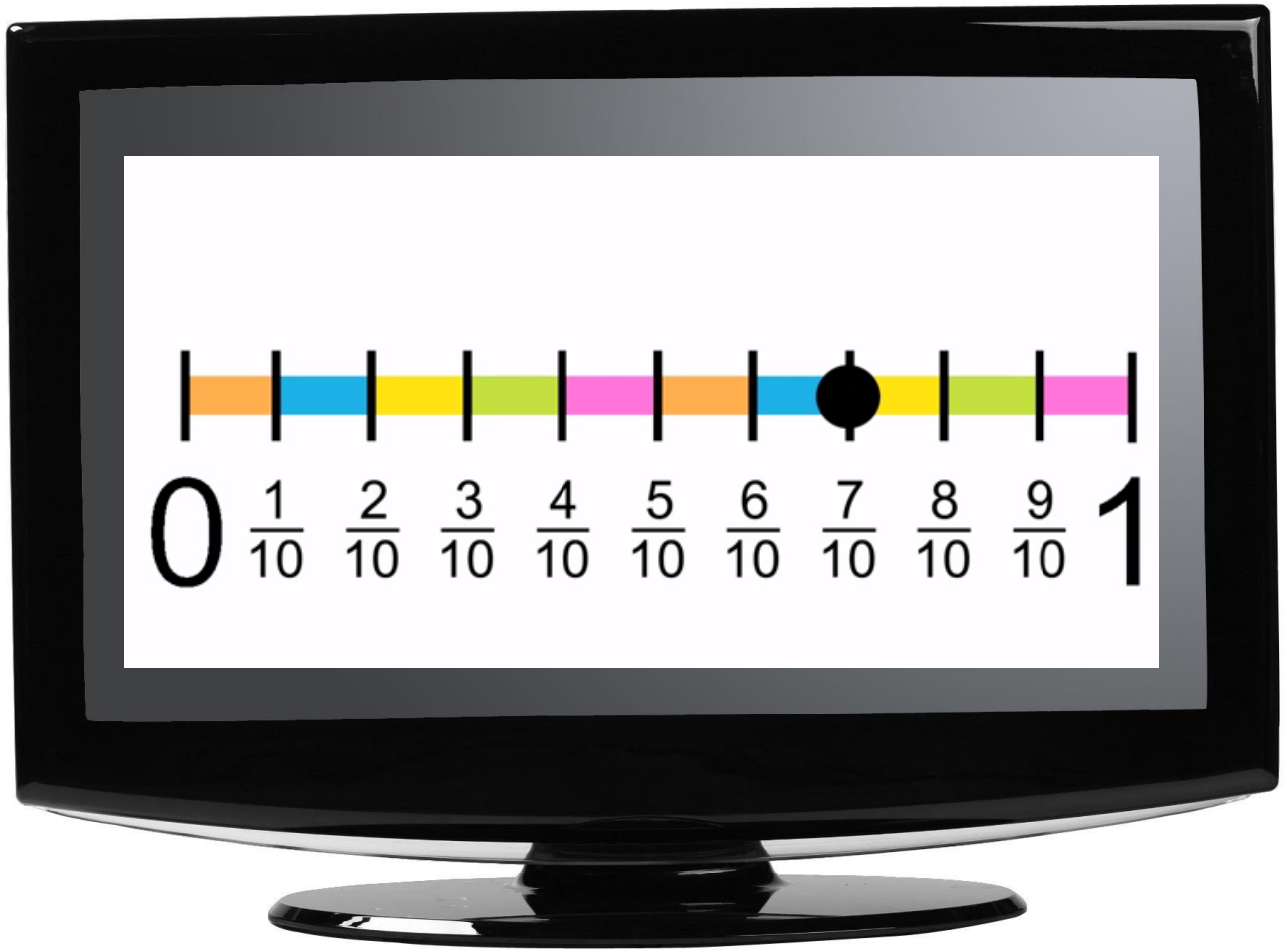


Unit 10 Lessons:

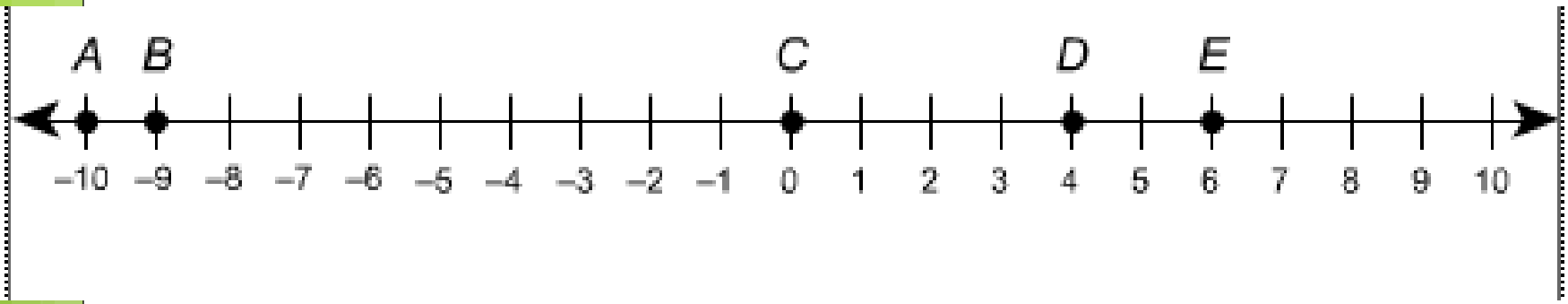
- Points on a Coordinate Plane
- Using Points to Solve Problems
- Equations with Two Variables
- Scatter Plots
- Interpreting Scatter Plots

Video Time!!!

http://www.youtube.com/watch



LET'S FIND SOME POINTS:



_____

_____

_____

_____

_____

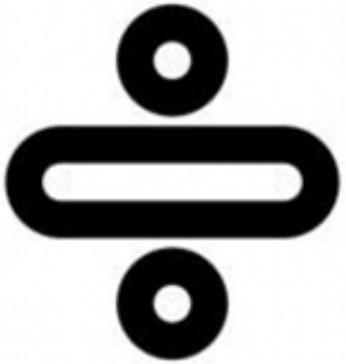
Reminder: Numerator Divided by Denominator

$\frac{3}{5}$ is equal to:

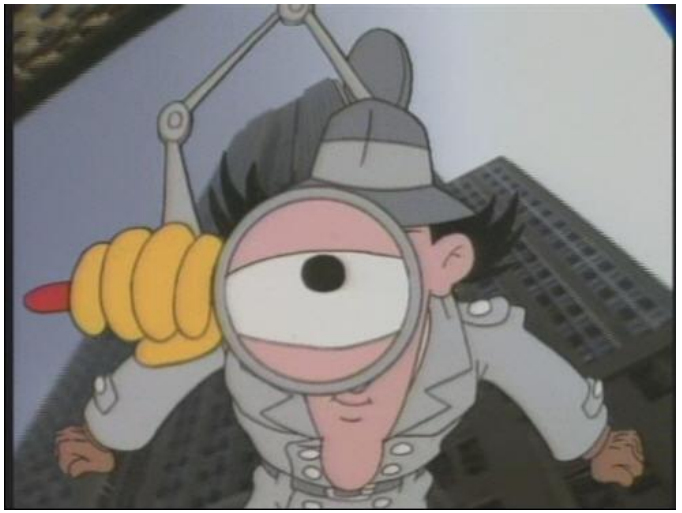
A. .6

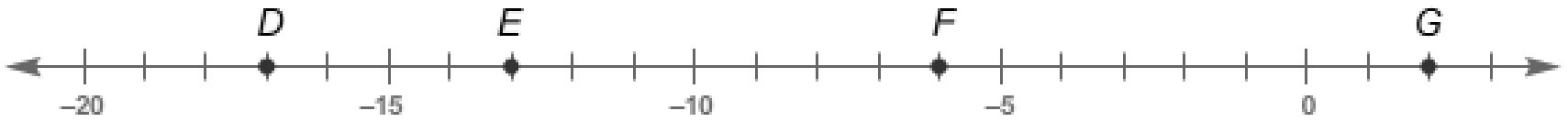
B. 1.6

C. .5



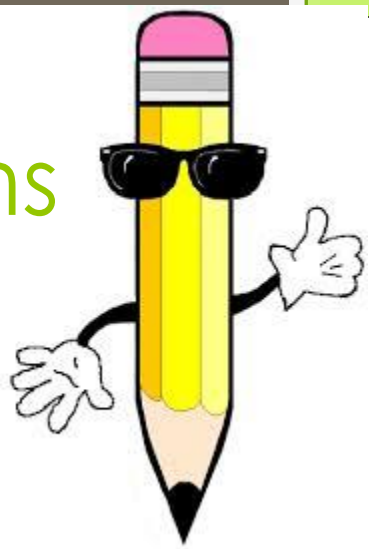
- Identify the scale
- Identify the coordinate location!

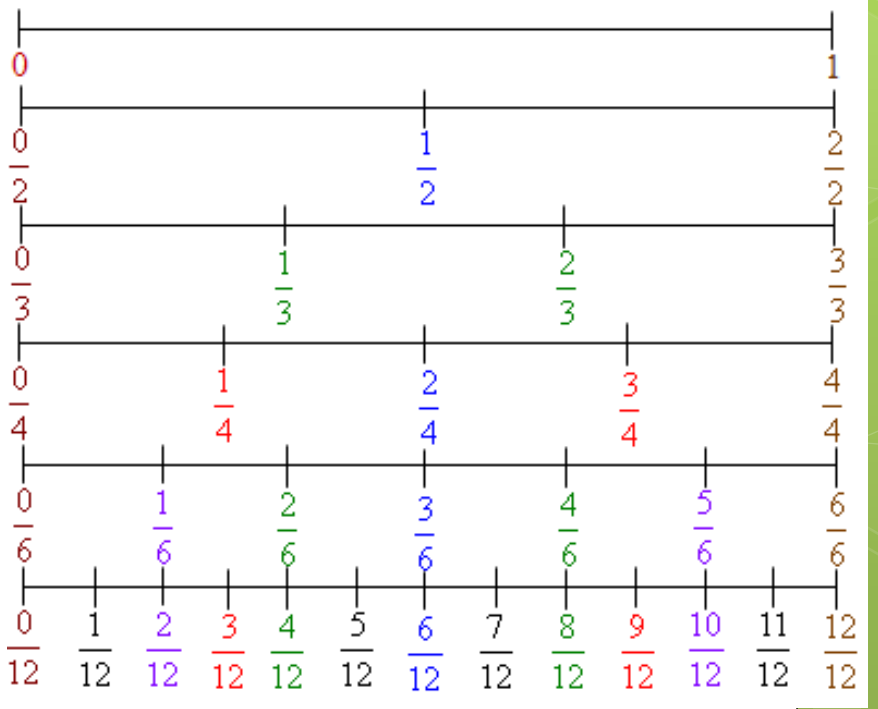




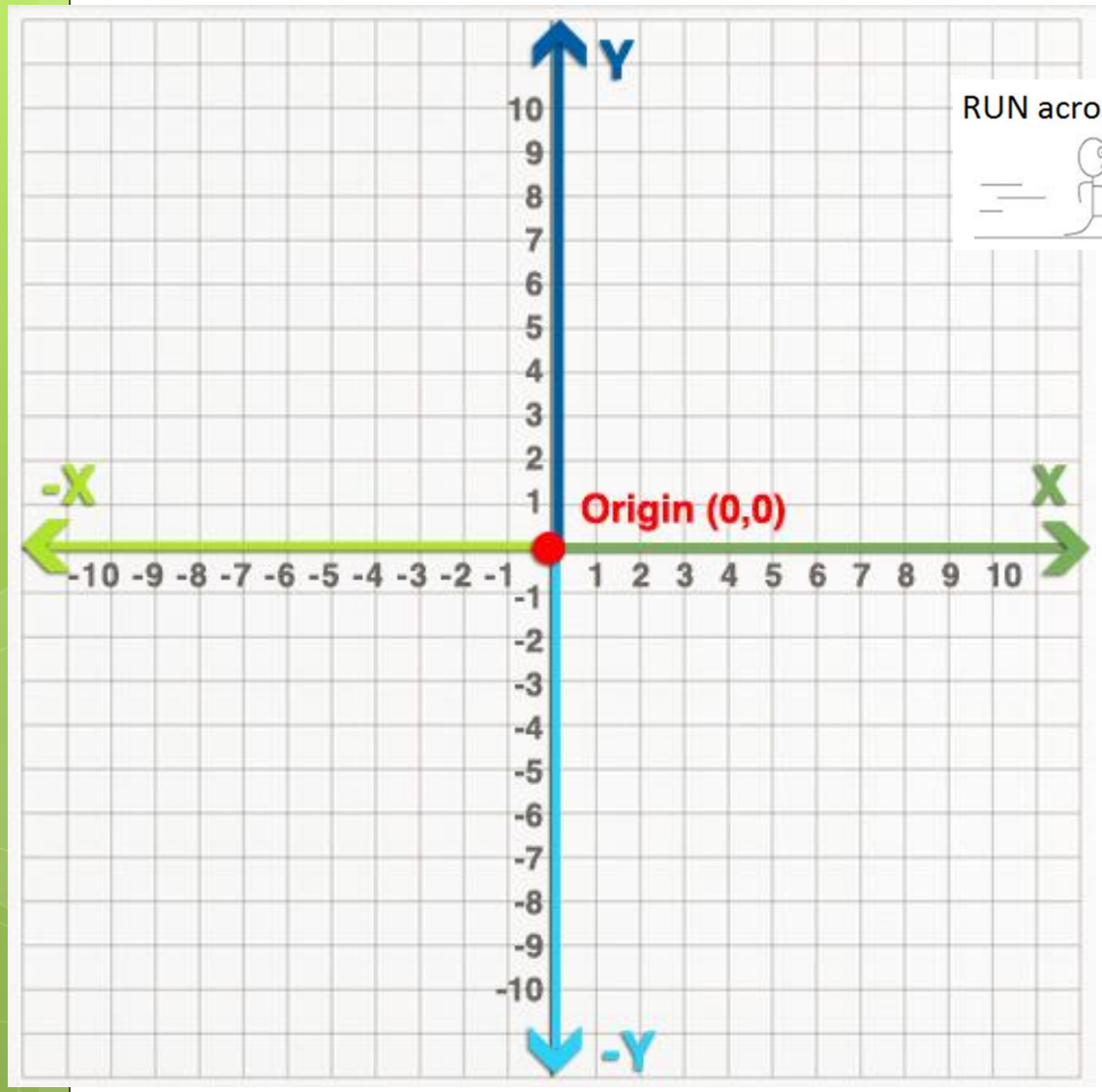
Using Points to Solve Problems

- Let's graph the fraction: $\frac{4}{6}$



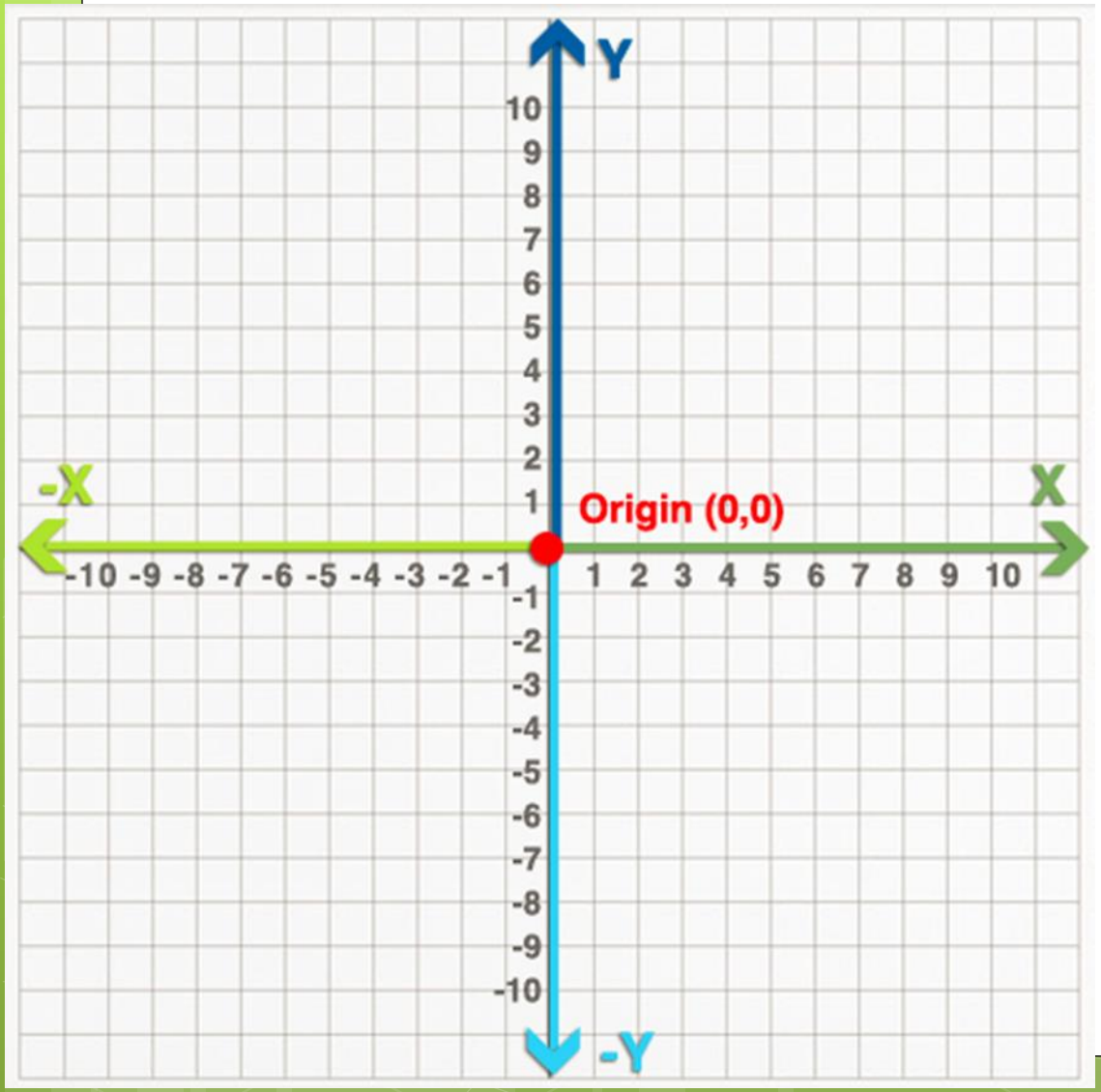


Locating Points On A Coordinate Plane



RUN across the X axis before you JUMP up the Y axis

Let's Plot Some Ordered Pairs Together!



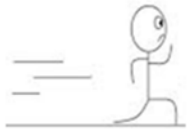
PLOT:

(-2, 6)

(4, -6)

(9, 0)

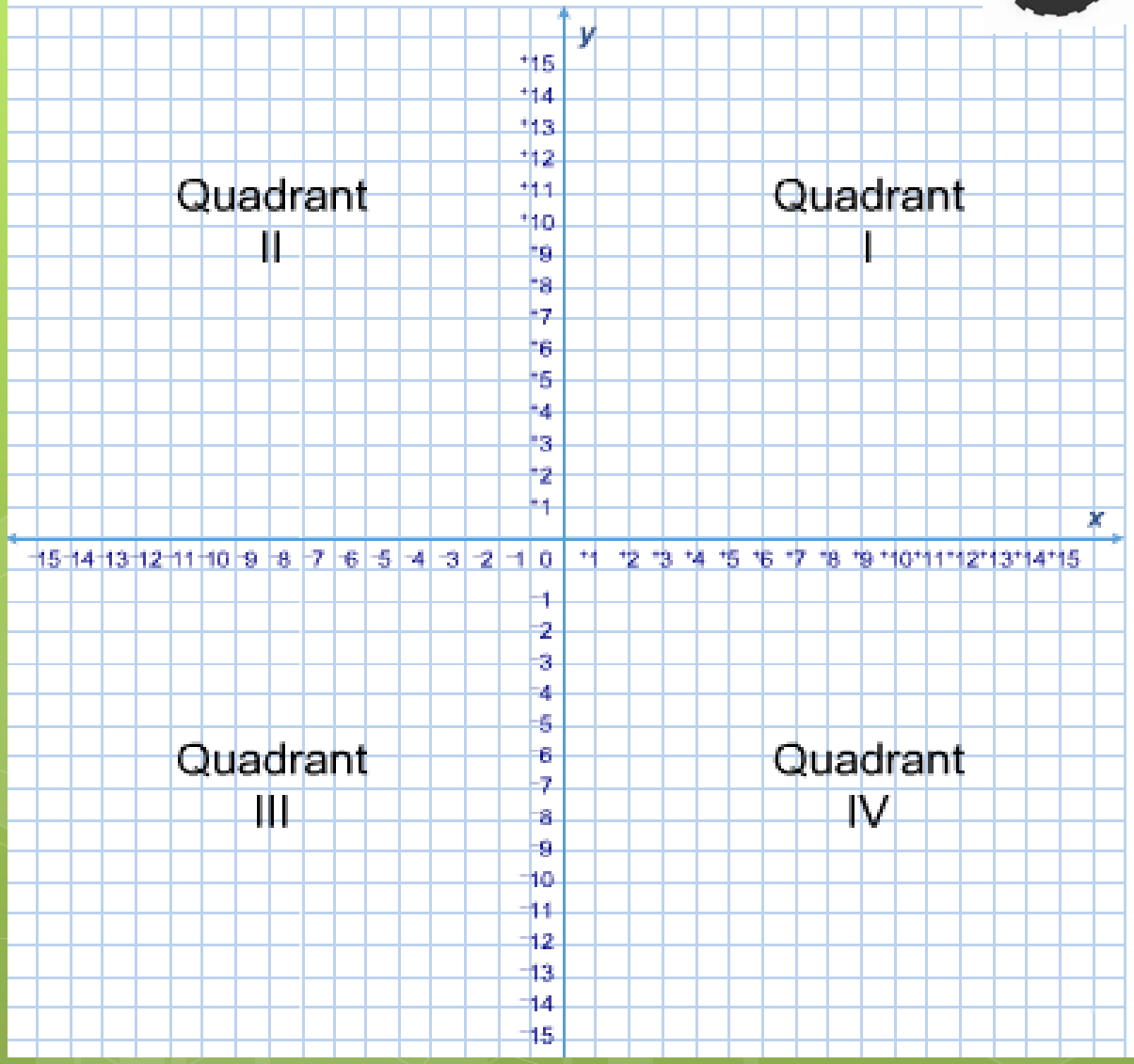
RUN across the X axis



before

you JUMP up the Y axis

Quadrants



This table may help you remember the signs for *x*- and *y*-values in each quadrant.

Quadrant	*x*	*y*
I	+	+
II	–	+
III	–	–
IV	+	–

QUICK CHECK

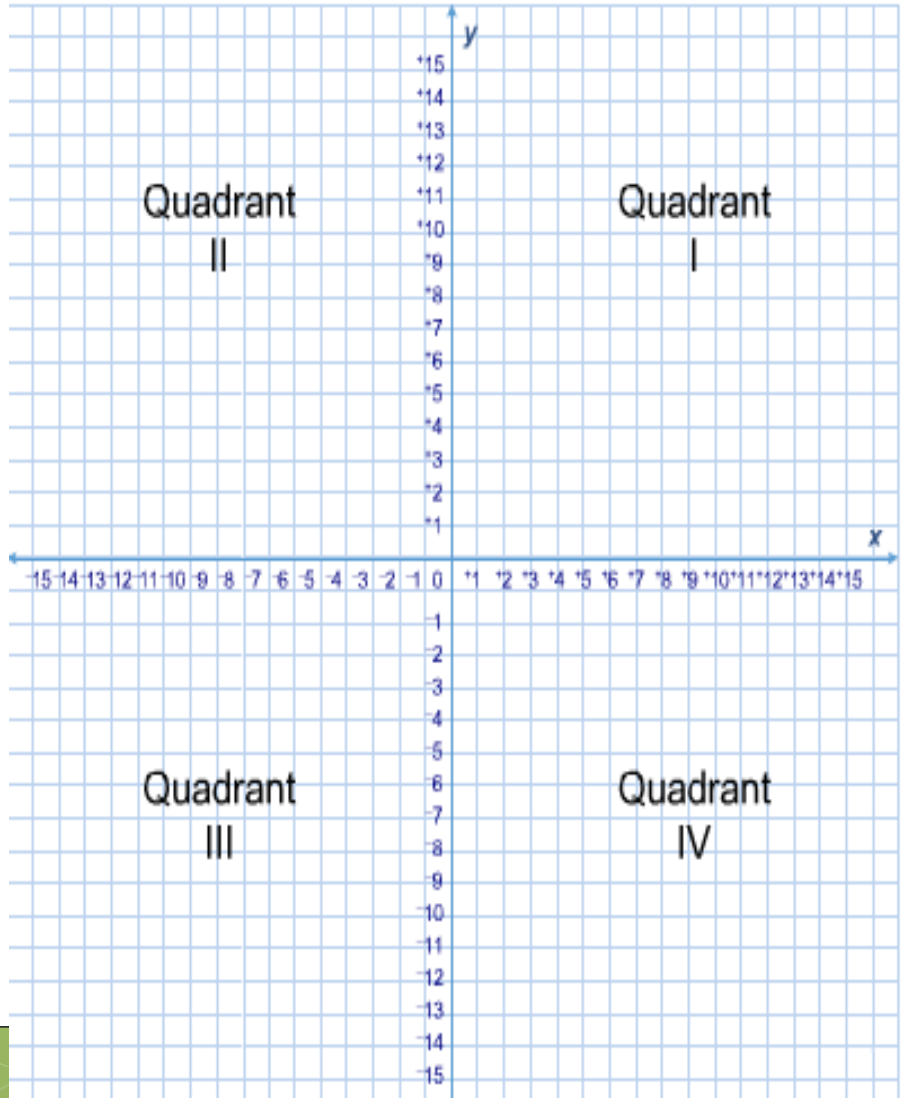
- Which Quadrant would the order pair (9,-2) fall in?

A Quadrant I

B Quadrant II

C Quadrant III

D Quadrant IV



This table may help you remember the signs for *x*- and *y*-values in each quadrant.

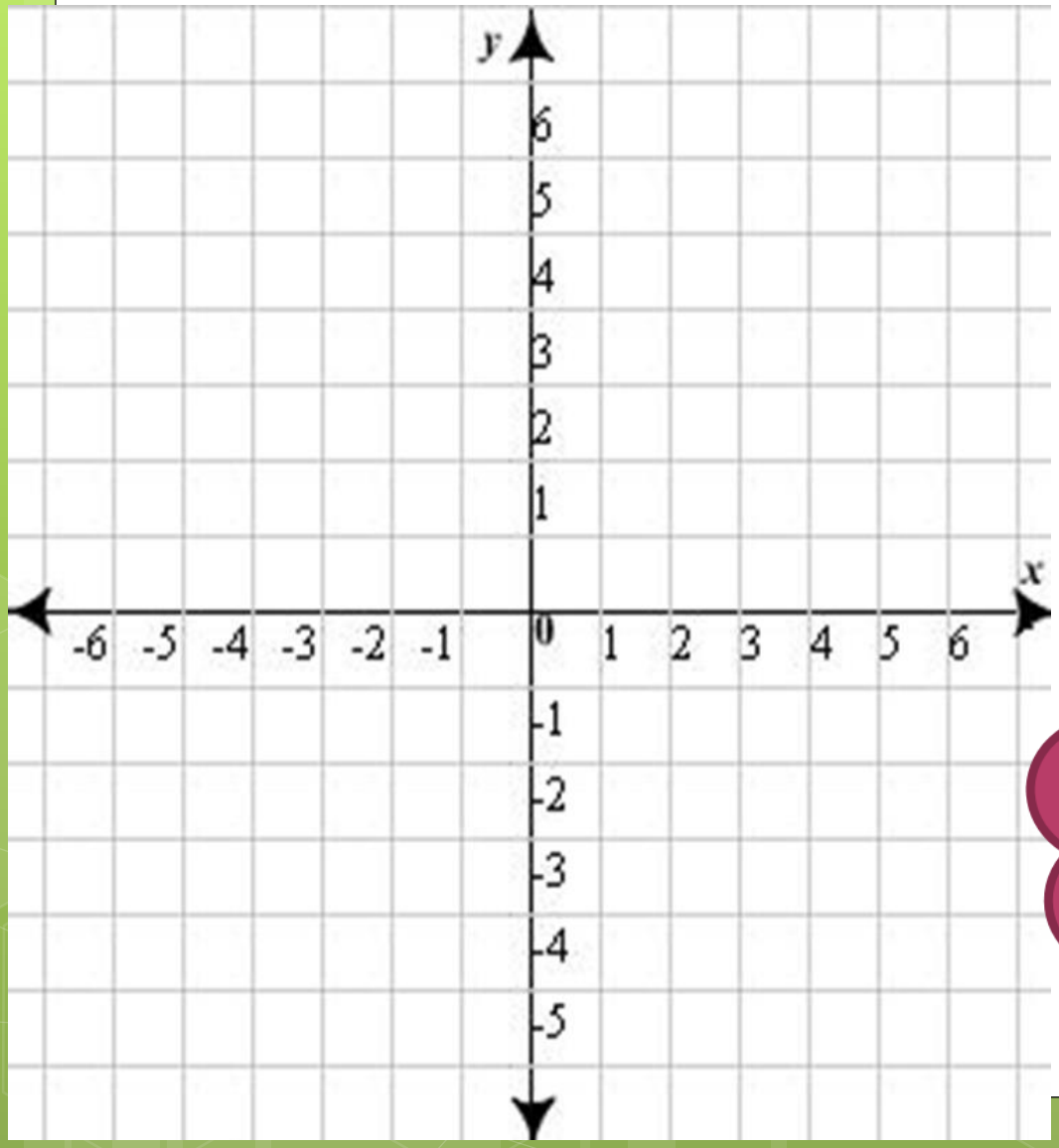
Quadrant	*x*	*y*
I	+	+
II	–	+
III	–	–
IV	+	–

SMILE BREAK!!!

Equations with Two Variables

http://www.brainpop.com/math/geometryandmeasurement/coordinateplane/

Volunteers Please??



Plot point

(3, -2)

(-1, 1)

(4, 2)

Think about it…..

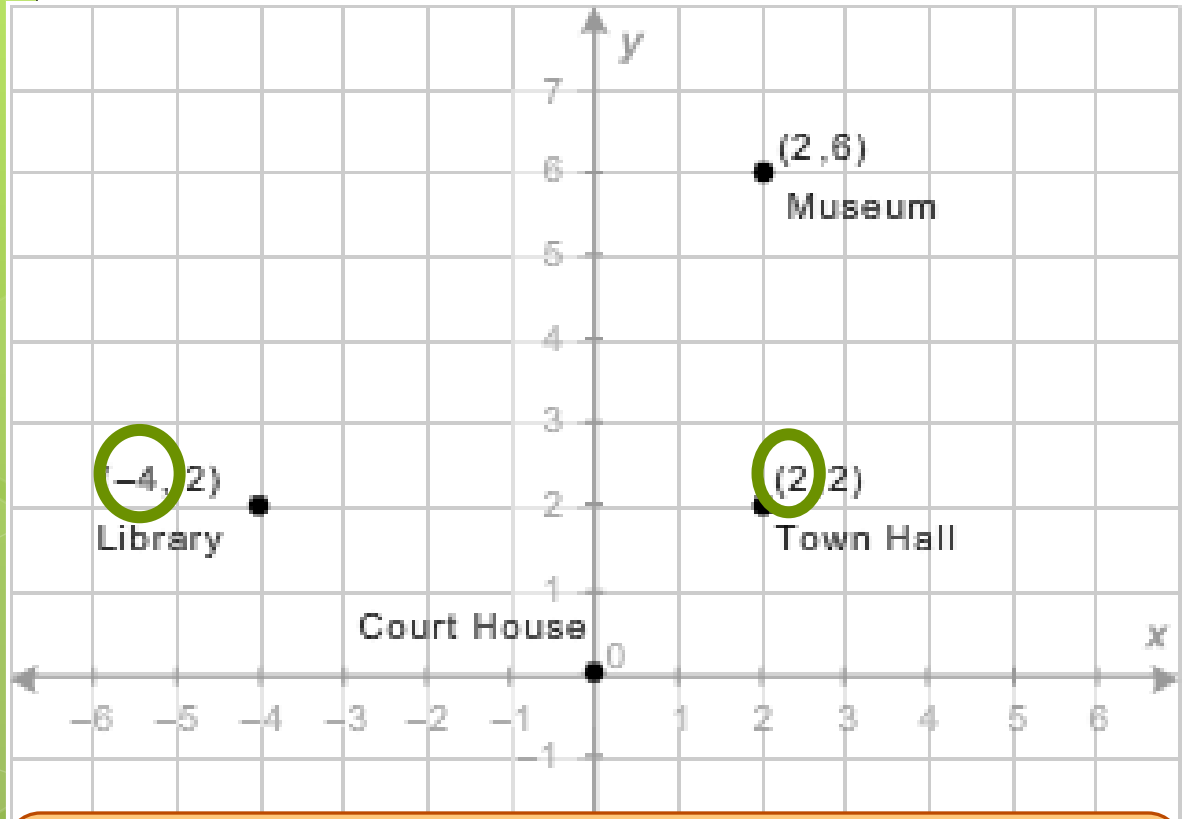
What directions did you move?

What is the distance between the Town Hall and the Museum in city blocks?

$$d = |y_2 - y_1|$$

Either value can be substituted for y!

What is the distance between the Town Hall and the Library in city blocks?

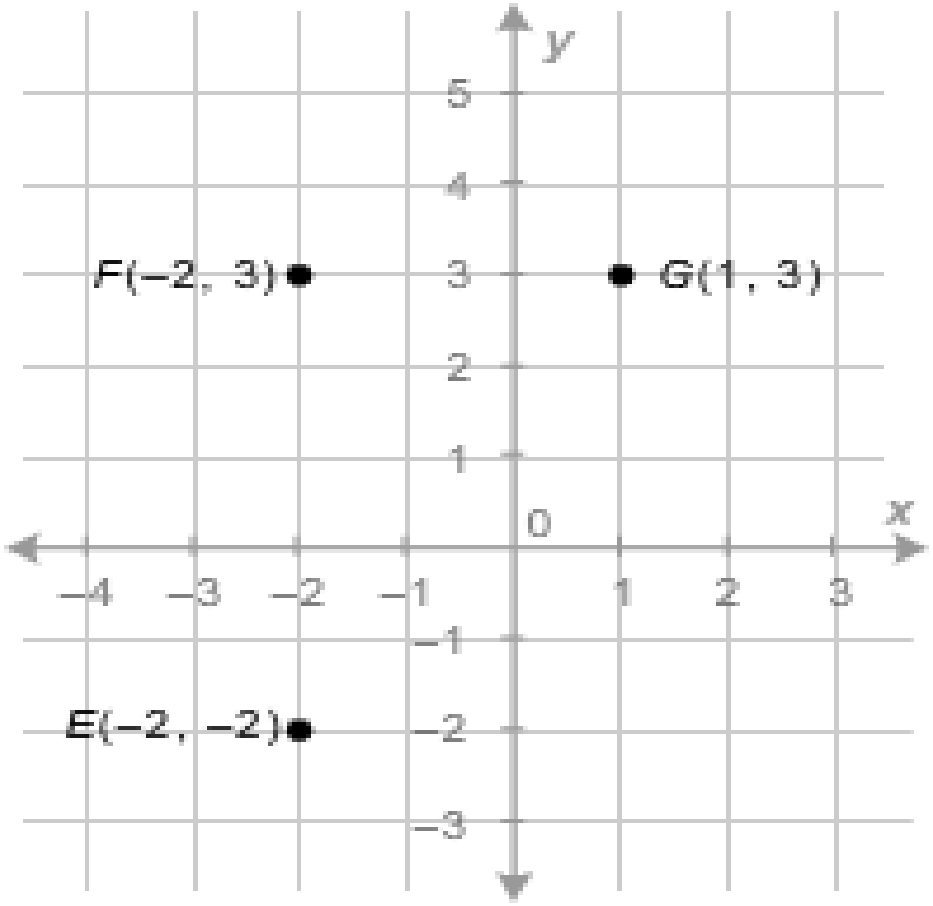


1) Counting

2) $d = |x_2 - x_1|$ formula

Either value can be substituted for $x_!$

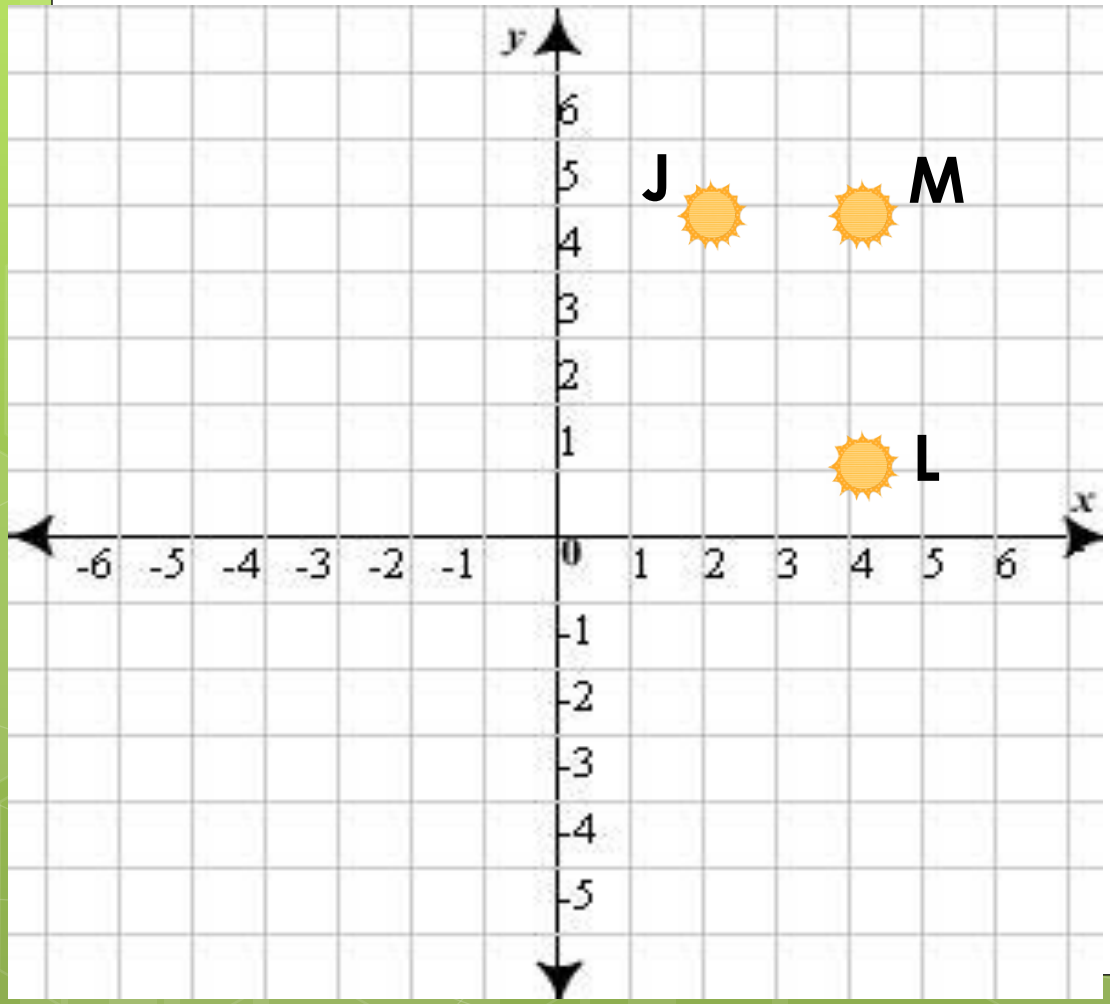
Can We Find The Missing Coordinates to Complete the Rectangle? OF COURSE!



What is the missing coordinate H? How do we find it?

QUICK CHECK:

What is the missing coordinate K?



A (3, 2)

B (2, 1)

C (4, 5)

Linear Equations: Equations with two variables

$$x + 2y = 14.$$

To solve this equation, you must find the values of x and y that make the equation true. Since a solution is a pair of x- and y-values, each solution is an ordered pair (x, y).

Equations with two variables have many solutions

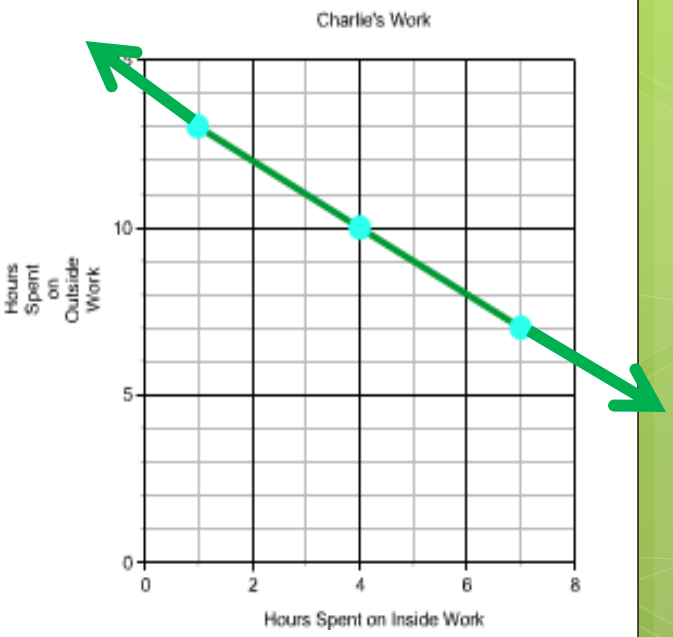
3 ways to show it!

$x + y = 14$

Possible Solutions:

(1, 13)
(4, 10)
(7, 7)

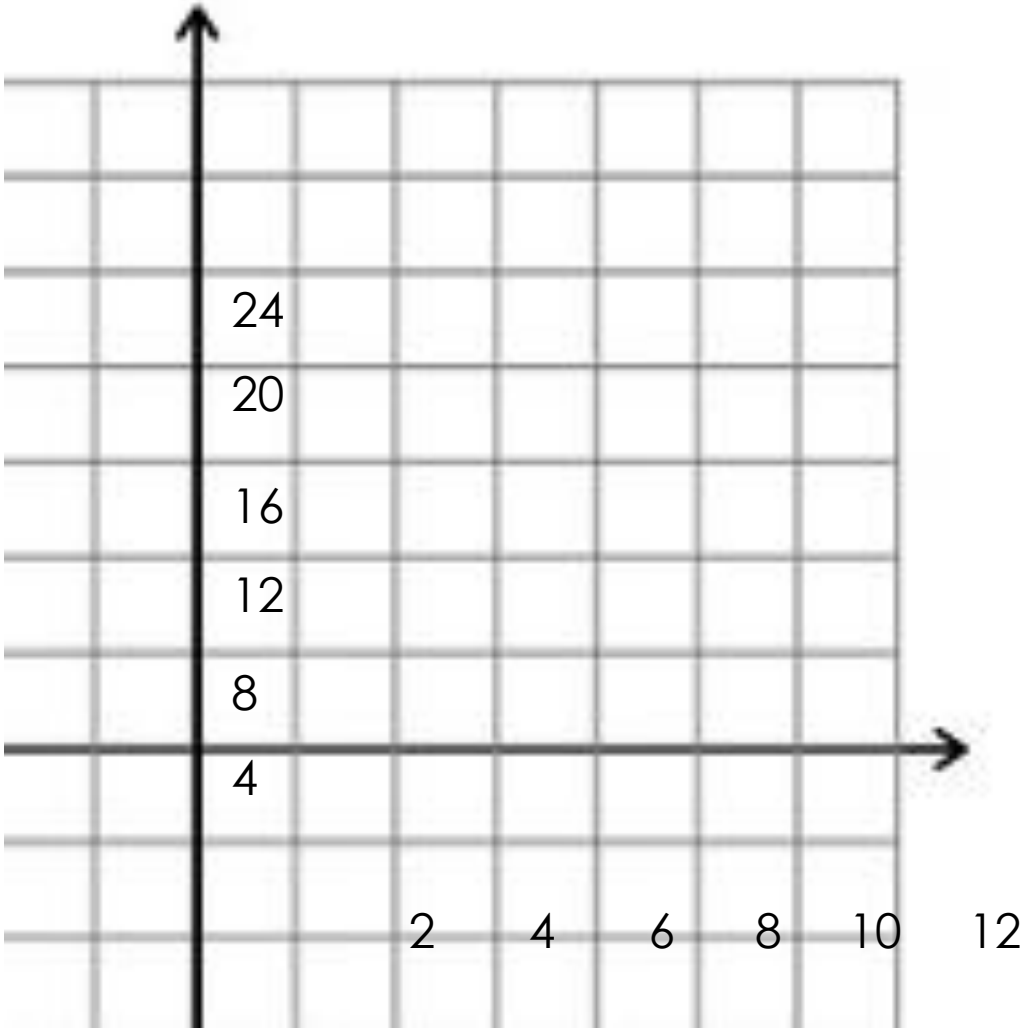
x + y = 14	
x	y
1	13
4	10
7	7



Graph It!

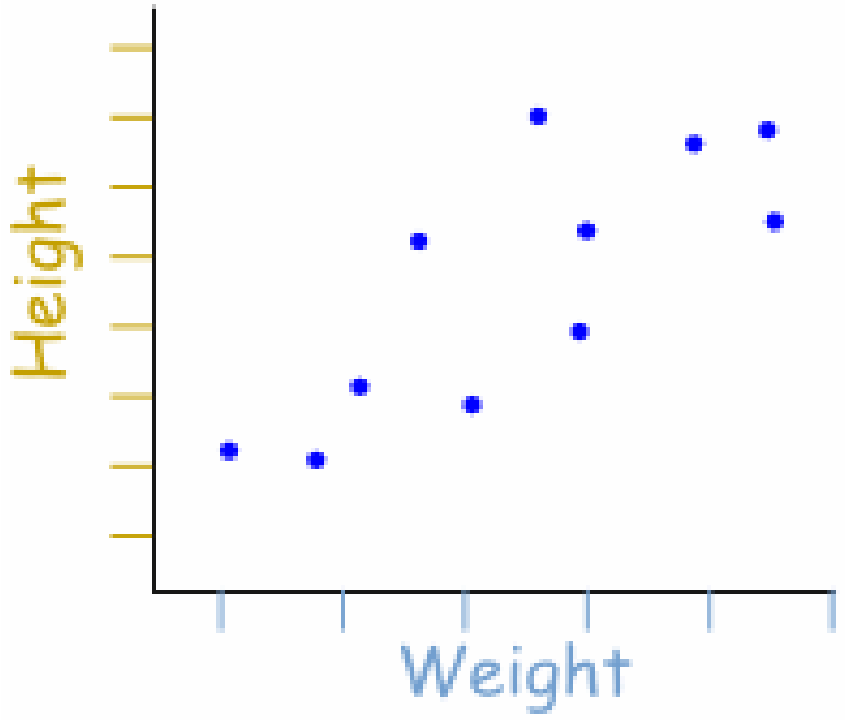
10 + 2 (x) = y

(4, 18)
(3, 16)
(6, 22)



Scatter Plots

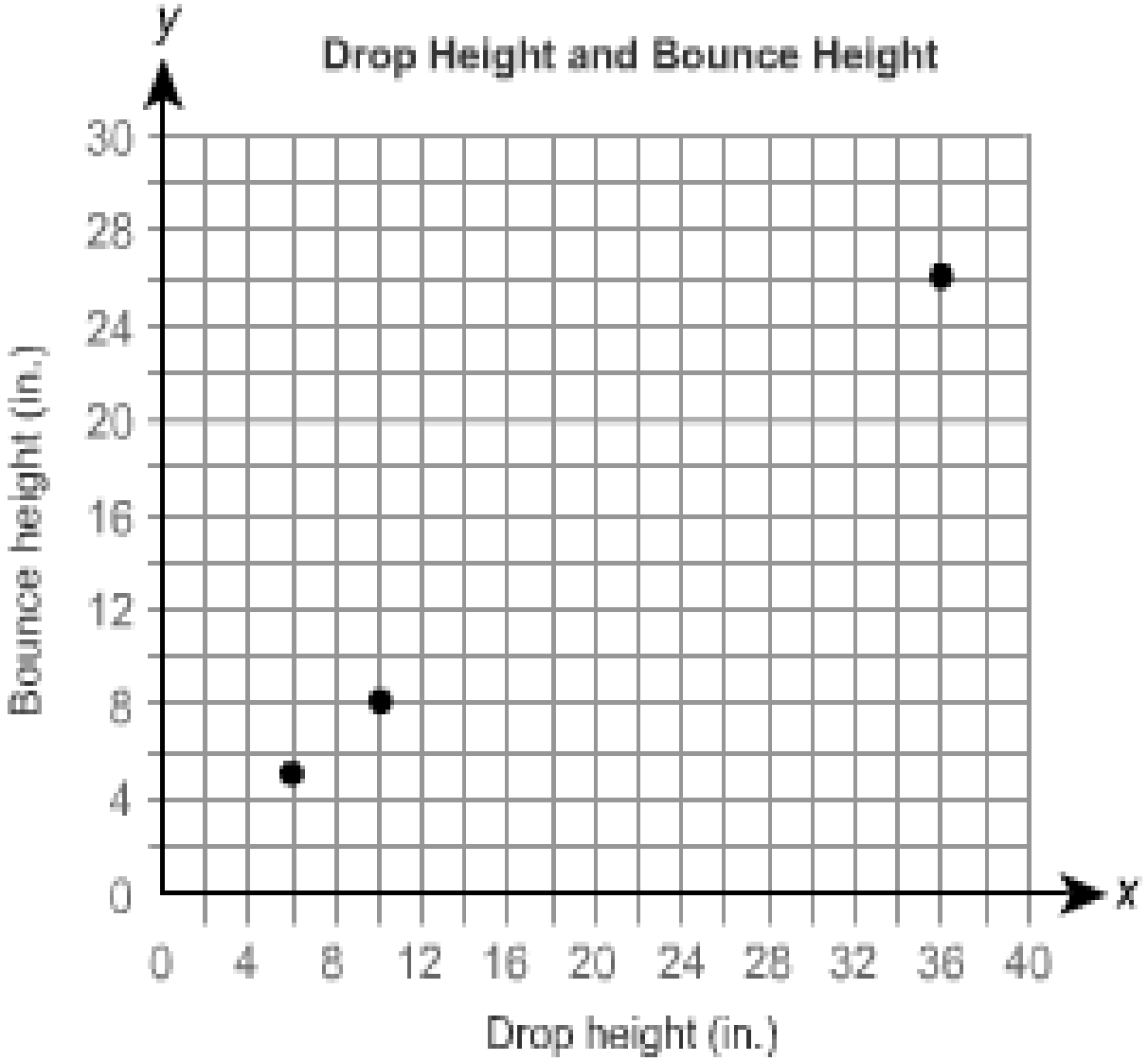
A graph of plotted points that show the relationship between two sets of data.



In this example, each dot represents one person's weight versus their height.

Our Own Scatter Plot: Let's Plot the Rest!

(Drop height, bounce height)
(36, 26)
(18, 14)
(10, 8)
(27, 20)
(15, 11)
(32, 24)
(6, 5)



Independent vs. Dependent

Independent Variable = represents a value you control or it affects another

Dependent Variable = a variable whose value changes with changes in the independent variable

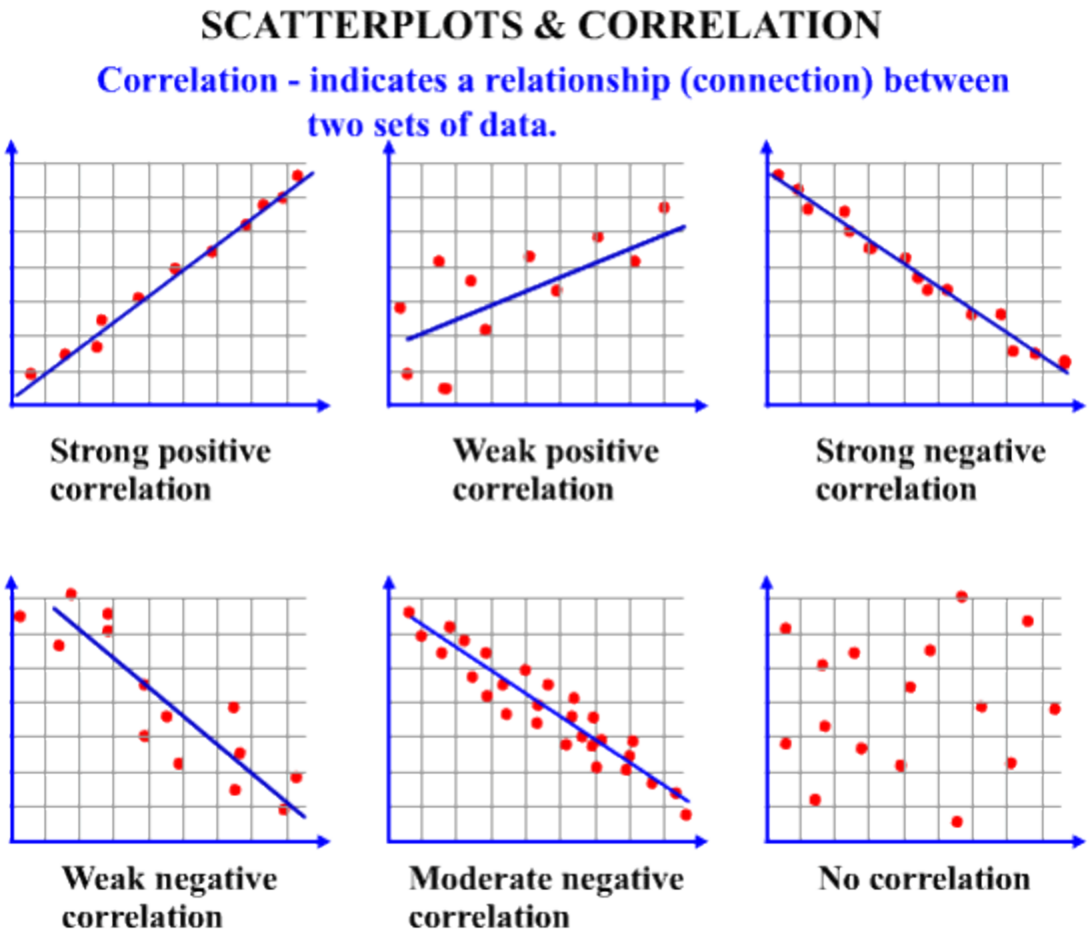
The longer you ride your bike, the farther you will travel.

VARIABLES: Time riding and distance traveled

INDEPENDENT VARIABLE: The time spent riding the bike (we can control that)

DEPENDENT VARIABLE: The distance traveled because it depends on how long we ride our bike

Interpreting Scatter Plots



- STUDY STUDY STUDY
- Reference: Mathhelp.com for cool videos!