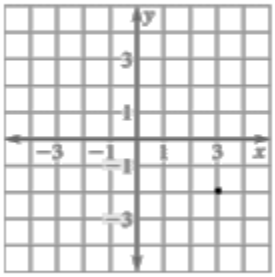
1.6/1.7/4.1-4.4 Quiz
Study Guide

4.1: Plot Points in the Coordinate Plane

- Identify/graph ordered pairs
- Identify the 4 quadrants

Ex: Write the coordinates of point graphed and identify the quadrant it lies in.



4.2: Graph Linear Equations

- **Be able to graph an equation using a table (choose appropriate values for *x*)**

Ex: Graph $2x - 4y = 8$

- **Be able to identify domain and range of a function**

Ex: You are transferring photos from your digital camera to a CD. Each photo on the camera takes up 2 megabytes of space. The number *p* photos that will fit onto a CD is given by the function $s = 2p$ where *s* is the amount of space on the CD. One CD can store up to 700 megabytes of data. Identify the domain and range of the function.

4.3: Graph Linear Functions Using *x* and *y* intercepts

- Find *x* and *y* intercepts from an equation
- Identify *x* and *y* intercepts from a graph
- Interpret the meaning of *x* and *y* intercepts as they apply to real-world problems

Ex: Find the *x* and *y* intercepts of the equation $0.2y - 0.3x = 0.6$

Ex: Graph $4x - 2y = -16$ using intercepts.

Ex: Your earn $16 an hour mowing lawns and $10 an hour washing windows. You want to make $500 in one week.

a) Write an equation to represent the situation
b) Graph the equation using *x* and *y* intercepts.
c) What do the intercepts mean in this situation?
d) What are three possible numbers of hours you can work at each job?
e) If you work 30 hours washing windows, how many hours do you have to work mowing lawns?

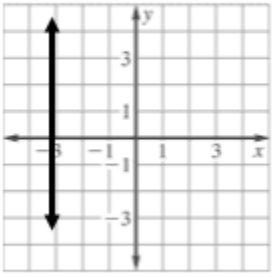
4.4: Slope and Rate of Change

- Find slope of a line that passes through two points
- Find slope of a line that is graphed
- Identify zero slope and undefined slope
- Find rate of change

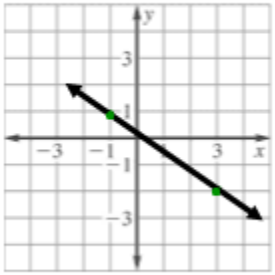
Ex: Find the slope of the line that passes through the points (6, –4), (–5 , –8)

Ex: Find the slope of the line that passes through the points (–5, 5) (2, 5)

Ex: Find the slope of the line



Ex: Find the slope of the line



Ex: The table shows the amount of water evaporating from a swimming pool on a hot day. Find the rate of change in gallons with respect to time.

Time (hours)	2	6	12
Gallons evaporated	4.5	13.5	27

1.6: Functions as Rules and Tables

- Be able to identify an input output relationship as a function or not and explain why.

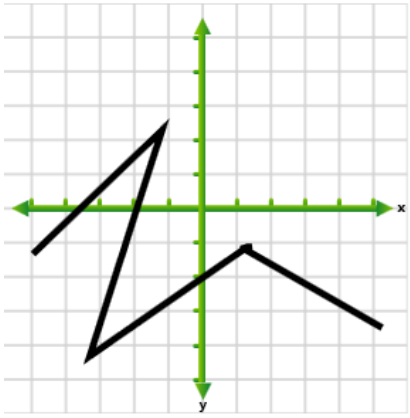
Ex:

x	*y*
3	1
2	1
1	1
0	1

Ex:

x	5	7	5	14
y	2	6	9	11

Ex:



- Be able to write a rule for a function given a table or graph.

Ex:

x	*y*
−10	7
−5	5
0	3
5	1
10	−1