

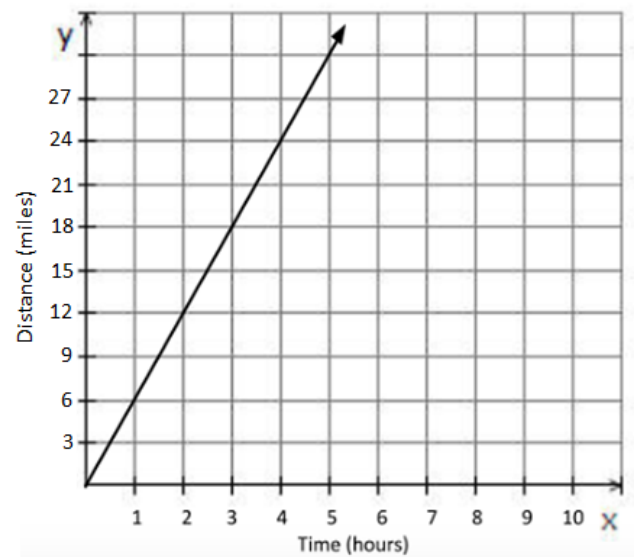
Name: _____

Date: _____

Directions – Submit answers online at <http://illuminate.online> access code [7FCCKYG](#)**Recall** – Activate schema by listing any related phrases or vocabulary regarding the topic below. Alternatively, watch a video about the topic!**Proportional Relationships**

1. The graph to the right shows the distance Mike travels on his bike over time. What is the unit rate for how far Mike travels in 1 hour?

- a. 3 miles
- b. 6 miles
- c. 1.5 miles
- d. 0.75 miles



2. Two companies are selling boxes of candy. The pieces of candy you get from Company A is represented in the table below. The pieces of candy you get per box from Company B is represented by an equation, with y representing the total number of pieces for x boxes.

Company A

Total Boxes	Total Pieces
16	448
20	560

Company B

$$y = 22x$$

How many total pieces of candy would you get if you bought 18 boxes of candy from the company that sells the fewest pieces per box?

- a. 616 pieces
- b. 396 pieces
- c. 504 pieces
- d. 288 pieces

3. Mike and Molly are both reading their books over the course of a month and record the number of pages they have read at certain dates.

Day of the Month	Mike pages read	Molly pages read
4	132	80
9	297	189
14	462	308
17	561	391
23	759	529

Determine who is reading at a proportional rate.

- a. Only Mike
 - b. Only Molly
 - c. Both Mike and Molly
 - d. Neither Mike nor Molly
4. Find the difference in the rates of change between Set A and Set B.

Set A	x	0	3	9	10
	y	0	-19.5	-58.5	-65
Set B	x	0	3	6	8
	y	0	-27	-54	-72

- a. -39
- b. -9
- c. 12
- d. -13

5. Two companies are selling beef jerky by the pound. The cost of jerky for Company A is represented in the table below, while the cost for Company B is represented by an equation, with y representing the total cost in dollars for x pounds of jerky.

Company A	
Total Pounds	Total Cost (\$)
15	450.00
20	600.00

Company B
 $y = 29.00x$

Find the total cost in dollars of buying 17 pounds of jerky from the more expensive company.

- a. \$340
- b. \$493
- c. \$255
- d. \$510

6. Two contractors are bidding on building a house. Contractor A's price is represented in the table below. Contractor B's price is represented by an equation, with y representing the total price and x representing the square feet of the house.

Contractor A	
Square Feet	Total Price (\$)
1048	129,952
1833	227,292

Contractor B
 $y = 112x$

Which contractor charges more per square foot and by how much?

- a. Contractor A charges \$12 more than Contractor B
- b. Contractor B charges \$12 more than Contractor A
- c. Both contractors charge the same amount
- d. Not enough information

Directions: Read the context below to answer questions 7-10.

Marcus kept track of his savings over summer break as he mowed lawns for extra money. After mowing 6 lawns, Marcus had \$168 saved. After mowing 10 lawns, Marcus had \$268 saved.

7. Which expression can be used to calculate the slope of the line that represents the relationship between lawns mowed, x , and money saved, y ?

a. $\frac{6-10}{168-268}$

b. $\frac{168-268}{10-6}$

c. $\frac{168-268}{6-10}$

d. $\frac{10-6}{268-168}$

8. What would the slope of the line represent in this context?

- a. *Marcus lost \$25 per lawn.*
- b. *Marcus earned \$1 for every 25 lawns.*
- c. *Marcus earned \$25 per lawn.*
- d. *Marcus earned \$100 per lawn.*

9. Which of the following statements must be true?

- a. *The relationship is proportional because the unit rate is equal to the slope.*
- b. *The relationship is proportional because the rate of change is \$25/per lawn.*
- c. *The relationship is not proportional because there is not a constant rate of change.*
- d. *The relationship is not proportional because the unit rate is not equal to the slope.*

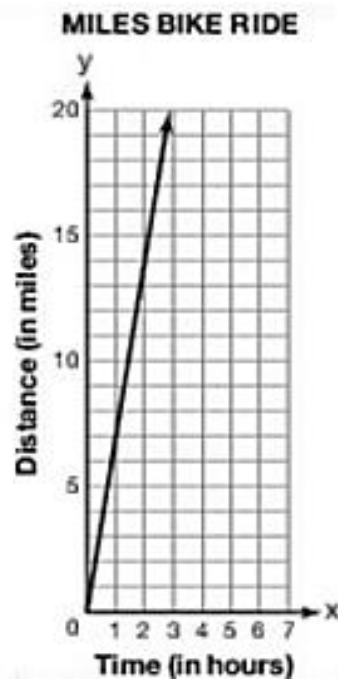
10. Write an equation to model the relationship between dollars saved, y , and lawns mowed, x .

Equation: _____

Exit Ticket – Week 1 Day 1

11.

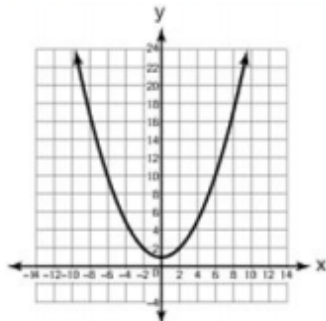
Miles went on a long distance bike ride. The graph below shows his distance per hour.



According to the graph, what is the unit rate?

- A. $\frac{1}{7}$ mi/hr
- B. $\frac{1}{5}$ mi/hr
- C. 5 mi/hr
- D. 7 mi/hr

12. Demarcus graphed the function shown below.



Which statement about the function is true?

- A. The function is only increasing.
- B. The function is only decreasing.
- C. The function decreases and then increases.
- D. The function is linear.

Name: _____

Date: _____

Directions – Submit answers online at <http://illuminate.online> access code [4KYZA3N](#)

Recall – Activate schema by listing any related phrases or vocabulary regarding the topic below. Alternatively, watch a video about the topic!

Solving Equations/Number of Solutions

Determine the number of solutions for each equation in 1-3.

1. $2x + 5 = 3(x - 2) + 3$

- a. No solution
- b. One solution
- c. Many solutions

2. $14 - 2m + 1 = -2m + 10$

- a. No solution
- b. One solution
- c. Many solutions

3. $2g - g + 7 = g + 7$

- a. No solution
- b. One solution
- c. Many solutions

4. Determine the value(s) of x that makes the equation true.

$$6x - 2 = 4x - 7 + 5$$

- a. All values of x
- b. No values of x
- c. $x = 1$
- d. $x = 0$

5. What value of m is a solution to the equation $11(m + 10) = 132$?

- a. $m = 2$
- b. $m = 121$
- c. $m = 11$
- d. $m = 1$

6. What value of t is a solution to the equation $8(2t + 9) - 16t = 56$?

- a. All values of t
- b. No values of t
- c. $t = 0$
- d. $t = 56$

7. Choose the correct solution of x that satisfies the equation.

$$2(5x - 1) - 8x = -(-2x - 10)$$

- a. $x = \frac{3}{4}$
- b. $x = -\frac{3}{4}$
- c. $x = 3$
- d. No solution

Exit Ticket – Week 1 Day 2**1.**Solve for h .

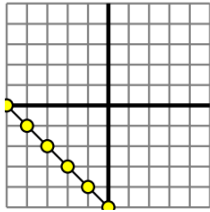
$$4h + 10 = 3\left(\frac{2}{3}h + 24\right)$$

- a. $h = -7$
- b. $x = 7$
- c. $x = 14$
- d. No solution

2.

Which statement best describes Functions A and B shown below?

A.



B.

$$Y = X + 2$$

X	Y
-1	1
0	2
1	3
2	4

- a. Both functions can be represented by the same equation.
- b. The graph of Function A would be parallel to the graph of Function B.
- c. The graph of Function A would be perpendicular to the graph of Function B.
- d. The slope of Function A is greater than the slope of Function B.

Name: _____

Date: _____

Directions – Submit answers online at <http://illuminate.online> access code [69Z7XYR](#)**Recall** – Activate schema by listing any related phrases or vocabulary regarding the topic below. Alternatively, watch a video about the topic!**Recall****Solving Equations/Number of Solutions**

1. Determine the solution to the equation $\frac{1}{2}(7x + 4) = 7 - 1.5x$
 - a. $x = 3.5$
 - b. $x = 1$
 - c. $x = 5$
 - d. $x = 0$

2. What is the solution of the equation $5m + 16.5 = 13.5 + 10m$?
 - a. $m = 2$
 - b. $m = -\frac{5}{3}$
 - c. $m = \frac{3}{5}$
 - d. $m = \frac{5}{3}$

3. What value of y is a solution to the equation $6y - \frac{11}{2} = 2y - \frac{13}{2}$?
 - a. $\frac{1}{4}$
 - b. -3
 - c. $-\frac{1}{4}$
 - d. 3

Directions: Determine the number of solutions to the equations in problems 4-6.

4. $3(x + 2) = 3x - 6$

- a. No solution
- b. One solution
- c. Many solutions
- d. Not enough information

5. $6\left(-0.5z - \frac{1}{6}\right) = -4\left(\frac{2}{8} + 0.75z\right)$

- a. No solution
- b. One solution
- c. Many solutions
- d. Not enough information

6. $2x + 6(1 - 0.1x) = 2x - 6$

- a. No solution
- b. One solution
- c. Many solutions
- d. Not enough information

7. Given the function $y = 3x + 21$, what is the value of x if $y = 42$?

- a. $x = 3$
- b. $x = 13$
- c. $x = 21$
- d. $x = 7$

8. Garrett solves the given equation below and shows every step of his work. Which statement best identifies the mistake Garrett made and on which step he made it?

Given	$3(0.5 + x) = \frac{35x + 25}{5}$
Step 1	$1.5 + 3x = 7x + 5$
Step 2	$1.5 + 10x = 5$
Step 3	$10x = 3.5$
Step 4	$x = 0.35$

- a. Step 1; Garrett did not perform the distributive property correctly.
- b. Step 1; Garrett did not simplify the fraction correctly.
- c. Step 2; Garrett did not perform the correct inverse operation.
- d. Step 2; Garrett only did an operation on one side of the equation.

9. Determine the solution, if any, to the equation below.

$$2\left(x + \frac{1}{4}\right) = 4(x - 1)$$

Exit Ticket – Week 1 Day 3

10.

Solve for y :

$$11(y - 2) + 3y = -7y + 14$$

A. $\frac{7}{12}$

B. $1\frac{5}{7}$

C. 14

D. 21

11.

Clifford earns \$120 for each 8 hour work day. His cousin Reggie gets paid \$13 an hour. Which of the following statements correctly compares their pay rates?

- A. Clifford gets paid \$2 less an hour than Reggie.
- B. Reggie gets paid \$2 less an hour than Clifford.
- C. Clifford gets paid \$16 more an hour than Reggie.
- D. Reggie gets paid \$16 more an hour than Clifford.

Name: _____

Date: _____

Directions – Submit answers online at <http://illuminate.online> access code [W6FTE27](#)**Recall** – Activate schema by listing any related phrases or vocabulary regarding the topic below. Alternatively, watch a video about the topic!**Slope-Intercept Form of a Line**

1. Identify the linear equation with a slope of $\frac{1}{3}$ that passes through the point $(-6, 10)$.

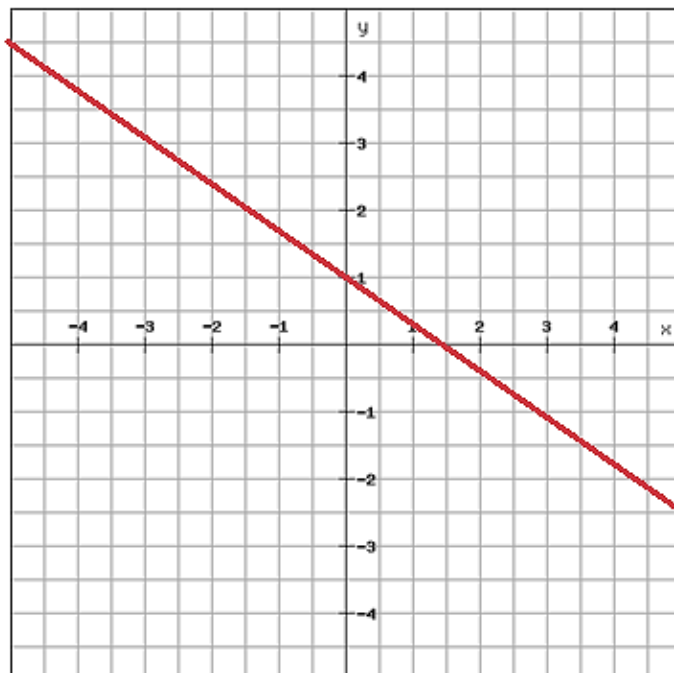
a. $y = \frac{1}{3x} + 12$

b. $y = \frac{1}{3}x + 10$

c. $y = \frac{1}{3}x + 12$

d. $y = \frac{1}{3}x - 10$

2. Which equation represents the line shown on the coordinate plane below?



a. $y = \frac{2}{3}x + 1$

b. $y = -\frac{3}{2}x + 1$

c. $y = -\frac{2}{3}x + 1$

d. $y = \frac{3}{2}x + 1$

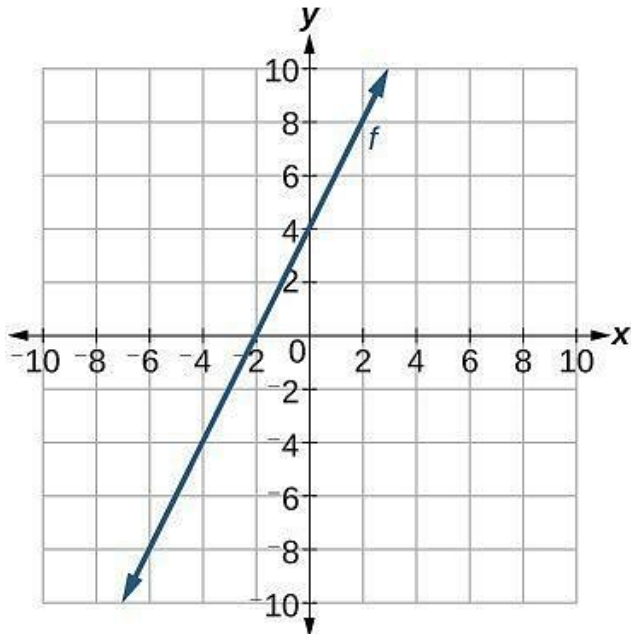
3. Determine the slope of the line that passes through (6, 2) and (-3, -1).

- a. $m = \frac{1}{3}$
- b. $m = -9$
- c. $m = 9$
- d. $m = -\frac{1}{3}$

4. Find the y-intercept of the line that passes through the points from problem 3.

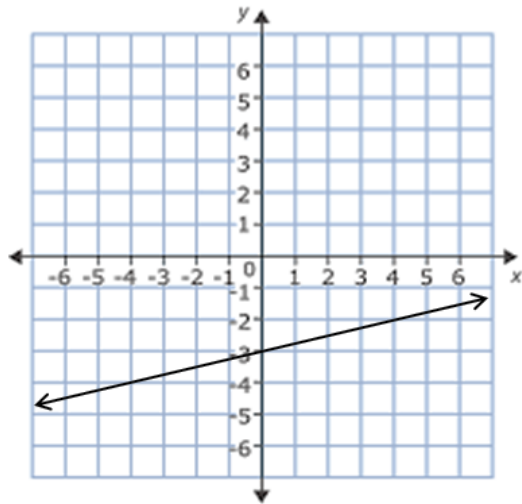
- a. $b = 1$
- b. $b = 2$
- c. $b = -1$
- d. $b = 0$

5. Which equation represents the line shown on the coordinate plane below?



- a. $y = 2x - 2$
- b. $y = 4x + 2$
- c. $y = \frac{1}{2}x + 4$
- d. $y = 2x + 4$

6. Which equation represents the line shown on the coordinate plane below?



- a. $y = \frac{1}{4}x - 3$
- b. $y = -\frac{1}{4}x - 3$
- c. $y = 4x - 3$
- d. $y = \frac{1}{4}x + 3$

7. Which equation represents the function shown in the table below?

x	y
2	23
4	37
6	51

- a. $y = 14x + 23$
- b. $y = 14x + 9$
- c. $y = 7x + 23$
- d. $y = 7x + 9$

8. The points (5, 4) and (x, 8) lie on the same line. If the slope of the line is -2 , what is the value of x ? Show work below.

State the value of x and explain your thinking.

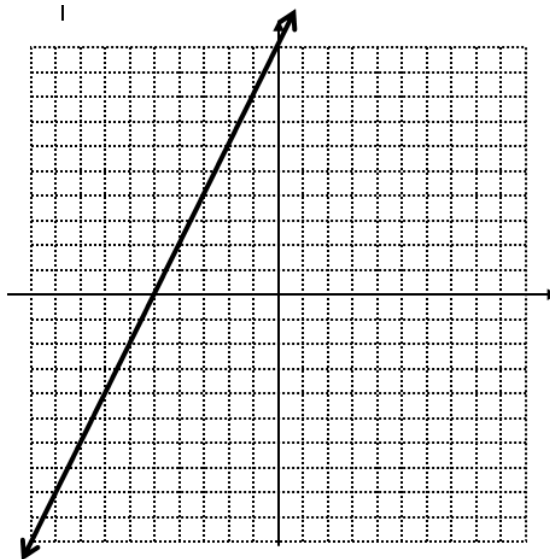
Exit Ticket Week 1 Day 4

Directions: Use the functions below to answer questions 9 and 10.

Function A

x	y
1	21
5	69
8	105

Function B



10. Which function has a greater rate of change?

- a. Function A
- b. Function B
- c. They have equal rates of change
- d. Not enough information

9. Which function has a greater rate of change?

- a. Function A
- b. Function B
- c. They have equal y-intercepts
- d. Not enough information