

# Week of April 27- May 1, 2020

## Mrs. Epperson

Hi!! My heart is truly missing you, I hope you are staying well!! If you are able, please connect with us through our google classroom. We have weekly calls on Thursdays if you are able to join us. They are NOT required, but it's nice to catch up and see your faces. The times we meet on Thursdays are 6th grade: 12:45-1:15, 7th grade:1:15-1:45, and 8th grade: 1:45-2:15, you can find the link to connect with us in your student email (same email and password you use to log into chromebooks; remember, the ending of your email address is @oakland5.org)

You may use your math folder to help you. You have to complete 1 worksheet, but may complete all 3. I am available at nichole.epperson@oakland5.org or 708-517-0534 for any questions. You may call or text.

All worksheets have the appropriate grade level/subject at the top.

Class	Choice 1	Choice 2	Choice 3
6th grade math	5-2	5-6	5-7
7th grade math	3-1	3-5	3-6
8th grade Algebra	2-5	2-6	2-8

Name: \_\_\_\_\_



PRACTICE



TUTORIAL

## 2-5 Additional Practice

Week of 4/27-5/1

1. **Leveled Practice** The graph and the table show the total cost of the number of pairs of jeans purchased at two different stores. Which store charges the higher cost for a pair of jeans?

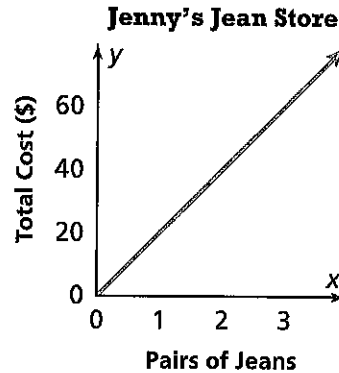
Find the unit rate (constant of proportionality) for Jenny's Jean Store.

$$\frac{\text{cost}}{\text{pairs}} = \text{_____} = \$ \text{ per pair}$$

Find the unit rate (constant of proportionality) for Jean Warehouse.

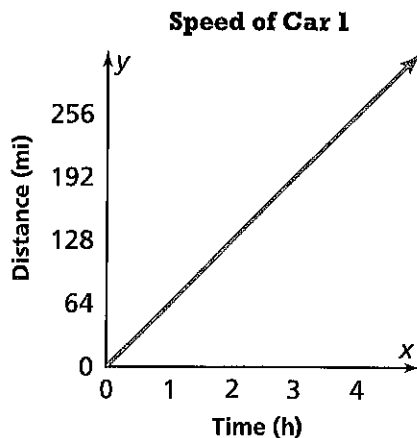
$$\frac{\text{cost}}{\text{pairs}} = \text{_____} = \$ \text{ per pair}$$

So \_\_\_\_\_ charges the higher rate.

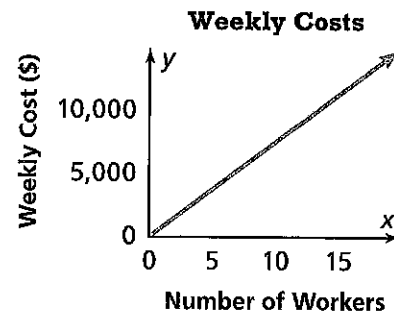


Jean Warehouse				
Pairs of Jeans	2	3	4	5
Total Cost (\$)	36	54	72	90

2. The graph shows the average speed of Car 1 which is traveling on a highway. The equation  $y = 55x$  represents the average speed of Car 2, where  $y$  is the distance in miles and  $x$  is the time in hours. Which car is traveling at the greater speed?



3. The graph shows a proportional relationship between the number of workers and weekly cost, in dollars, for a company in its first year. The following year, the company spends \$7,200 per 12 employees. Did the rate increase or decrease the following year?

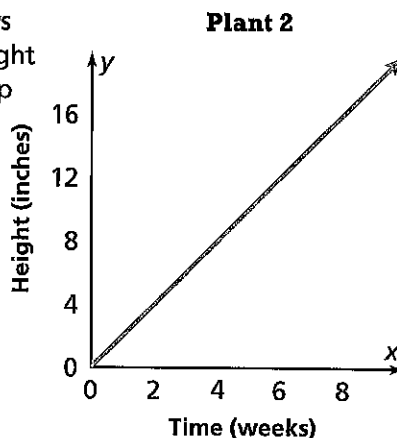


Algebra- Epperson, week of 4/27-5/1

4. Corey compares the heights of two plants to see which plant grows more per week. The table shows the relationship between the height and number of weeks for Plant 1. The graph shows the relationship between the height and number of weeks for Plant 2.

Which plant grows at the faster rate?

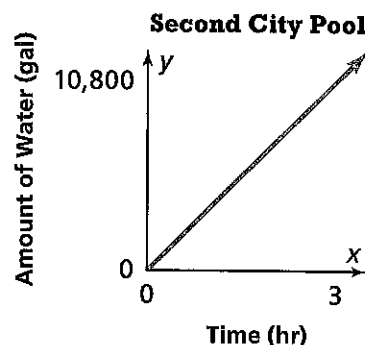
Plant 1				
Weeks	2	3	4	5
Height (inches)	8	12	16	20



5. **Higher Order Thinking** At the beginning of summer, a maintenance crew refills a swimming pool at a city park. The relationship between the time in hours to fill the pool and the amount of water in the pool is proportional. After 4 hours, the pool holds 5,200 gallons of water.

a. How could you graph this relationship?

b. The same crew refills a second pool as represented by the graph shown. Is the second pool filled at a faster or a slower rate than the first pool? Explain.



**Assessment Practice**

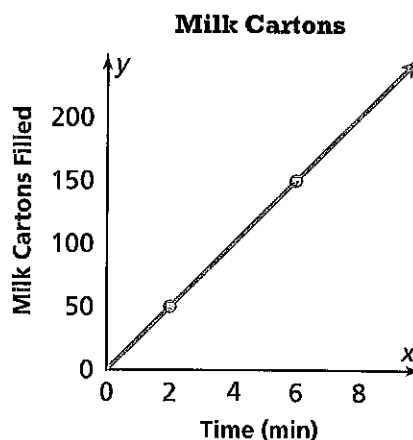
6. The graph shows the relationship between the time in minutes and the number of milk cartons that Machine 1 can fill. The equation  $y = 22x$  describes the rate at which Machine 2 can fill cartons where  $x$  is the number of minutes and  $y$  is the number of cartons filled.

**PART A**

What is the unit rate for each machine?

**PART B**

Which machine can fill cartons at a faster rate?  
How much faster?





## 2-6 Additional Practice

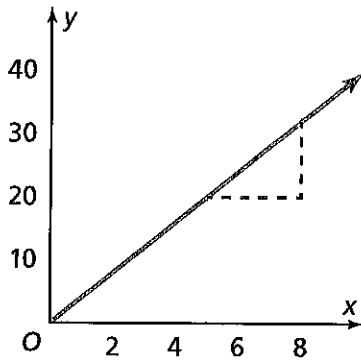
Week of 4/27-5/1

Levelled Practice In 1 and 2, find the slope of each line.

Scan for  
Multimedia



1. Find the slope of the line.

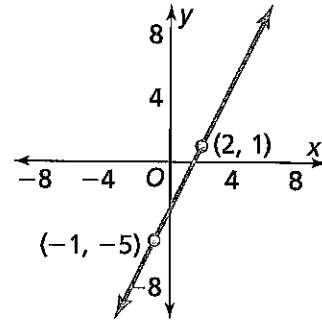


$$\text{slope} = \frac{\text{rise}}{\text{run}}$$

$$= \frac{30}{8} =$$

The slope is \_\_\_\_\_.

2. Find the slope of the line. Use the two points shown.



$$\text{slope} = \frac{\text{rise}}{\text{run}}$$

$$= \frac{1 - (-5)}{2 - (-1)} =$$

The slope is \_\_\_\_\_.

For 3 and 4, find the slope of the line that passes through the given points.

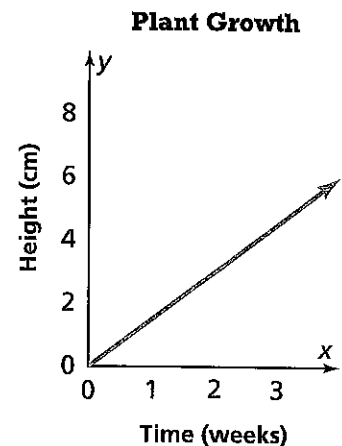
3. (0, 10) and (24, 6)

4. (0, 6) and (20, 14)

5. The graph shows the number of centimeters a particular plant grows over time.

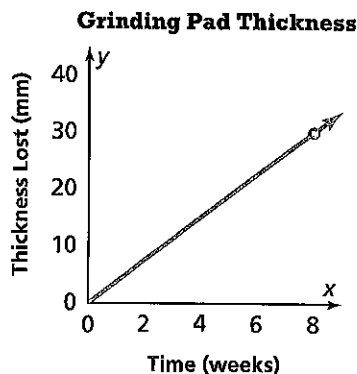
a. What is the slope of the line?

b. Reasoning What does the slope mean?



6. A machinist measures the thickness of a grinding pad every week. The graph shows how many millimeters the grinding pad has worn down.

- a. What is the slope of the line?
- b. Reasoning What does the slope mean?



7. Higher Order Thinking You use a garden hose to fill a circular wading pool that is 83.6 cm deep. You measure the depth of the water in the pool every 2 minutes. The table shows the data.

a. What is the slope of the line that represents the change in the depth of the water?

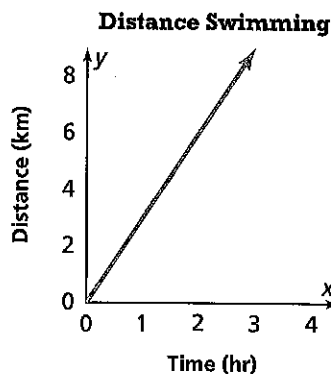
b. What does this slope mean?

c. How many minutes will it take to fill the pool?

**Filling a Wading Pool**

Time (minutes)	Depth of Water (cm)
0	0
2	4.4
4	8.8
6	13.2
8	17.6
10	22.0

8. The graph shows the number of kilometers Gina swims. What is the slope of the line and what does it mean?



**Assessment Practice**

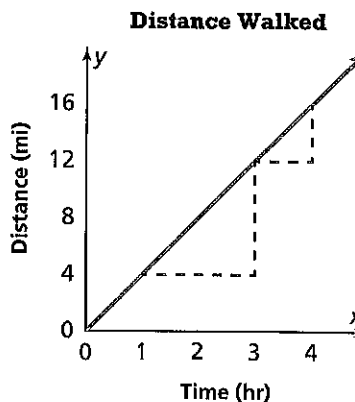
9. Donald graphs the distance he walks over time. The graph passes through the points (3, 12) and (4, 16).

**PART A**

Find the slope of the line that passes through these points.

**PART B**

Is the slope between (1, 4) and (3, 12) the same as the slope between (3, 12) and (4, 16)? Explain.





PRACTICE



TUTORIAL

## 2-8 Additional Practice

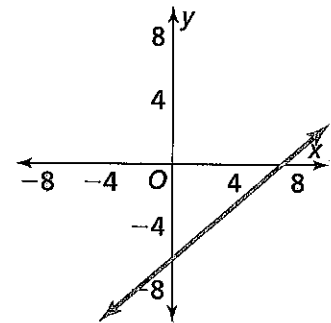
Week of 4/27-5/1

1. **Leveled Practice** Find the  $y$ -intercept for the line.

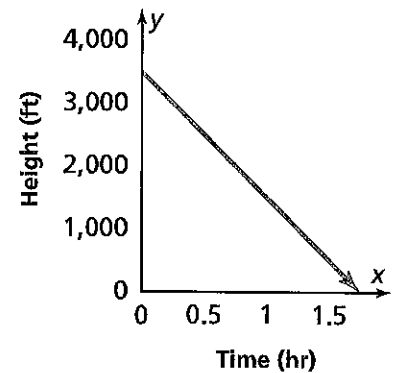
The  $y$ -intercept is the point where the graph crosses the  $y$ -axis.

The line crosses the  $y$ -axis at ( , ).

So, the  $y$ -intercept is .



**Height of Glider**



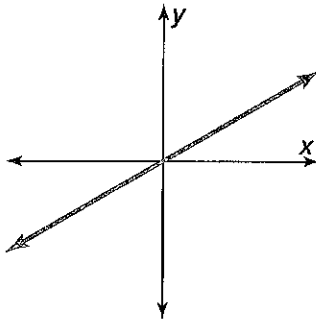
2. The line models the height of a glider  $y$ , in feet, over  $x$  hours.

a. Find the  $y$ -intercept of the graph.

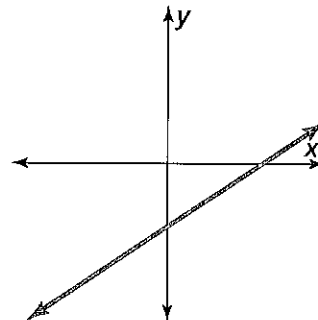
b. What does the  $y$ -intercept represent?

3. Which graph represents a proportional relationship? Explain.

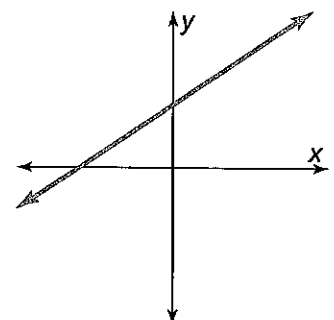
**Graph A**



**Graph B**



**Graph C**

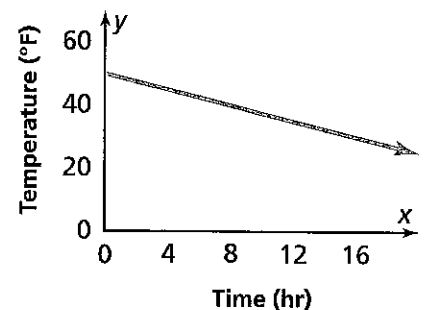


4. The line models the temperature starting at noon on an autumn day.

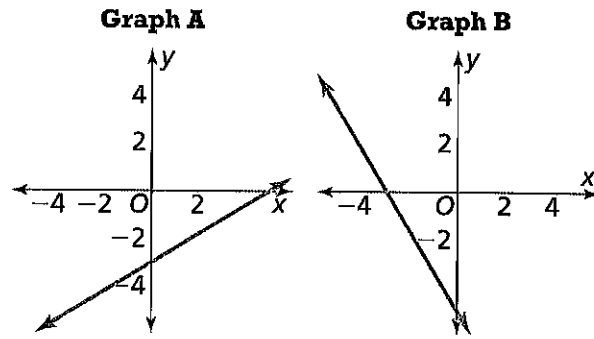
a. Find the  $y$ -intercept of the function.

b. What does the  $y$ -intercept represent?

**Temperature on Autumn Day**



5. Which graph has a  $y$ -intercept of  $-5$ ? Explain.

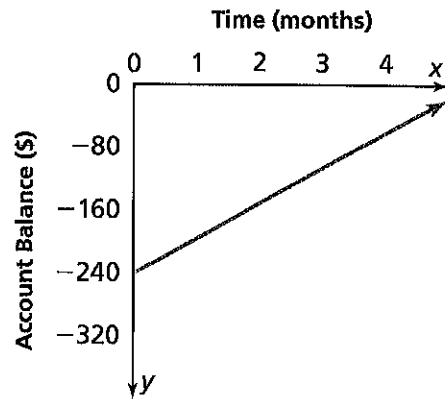


6. **Higher Order Thinking** Tasha incorrectly draws this graph to represent the balance in her savings account over time.

a. What is the  $y$ -intercept of the graph and what does it represent in the situation?

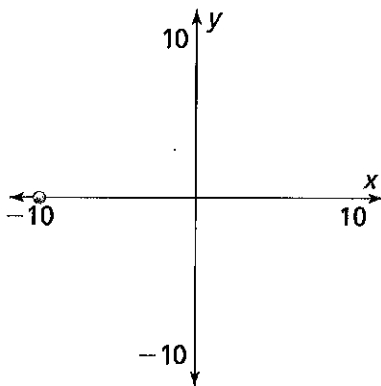
b. Does the  $y$ -intercept make sense in this situation? Explain.

c. Explain Tasha's possible error.



## Assessment Practice

7. Draw a line through the point such that the value of the  $y$ -intercept is the same as the value of the  $x$ -intercept.



8. Which statement describes the  $y$ -intercept of the graph of a proportional relationship?

- Ⓐ It is equal to the  $x$ -intercept of the line.
- Ⓑ It is greater than the  $x$ -intercept of the line.
- Ⓒ The line intersects the  $y$ -axis of the graph at the origin.
- Ⓓ The line intersects the  $y$ -axis of the graph above the origin.