

1. Write an equation that describes the situation below:
 $y = mx + b$

a. A taxi cab charges a flat rate of \$3.50 plus \$0.95 per mile.

2. Write an equation that models the linear relationship in the table below:

x	y
-2	1
0	5
4	13

a. slope:
b. y-intercept:
c. equation of line:
 $y =$

3. The graph below depicts Jeff's daily walk to school. Answer the questions below.

a. Describe what is happening at B.

1. Write an equation that describes the situation below:
 $y = mx + b$

a. A power company charges an installation fee of \$89 and then \$0.10 per kilowatt.

2. Write an equation that models the linear relationship in the table below:

x	y
-2	9
0	5
3	-1

a. slope:
b. y-intercept:
c. equation of line:
 $y =$

3. The graph below depicts Jeff's daily walk to school. Answer the questions below.

a. Describe what is happening at point B and D.

1. Bethany has \$120 in her savings account and spends \$8 a week at the candy store. Johnny has \$75 in his savings account and spends \$3 a week at the candy store.

a. Create a table to represent Bethany and Johnny's spending account.

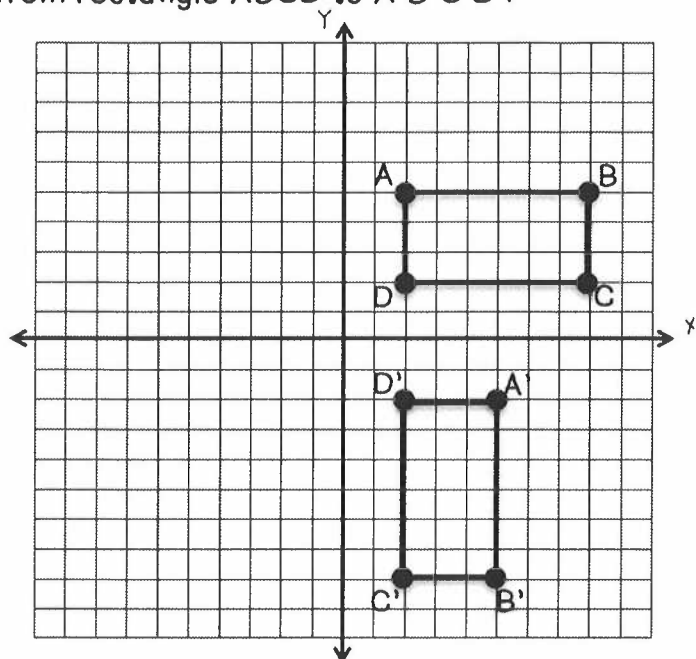
b. After how many weeks will Bethany and Johnny have the same amount in their savings account?

1. A large pizza at Yum Yum Pizza is \$6.40 plus \$0.80 per topping. At Perfect Pizza's a large pizza costs \$7.90 plus \$0.50 per topping.

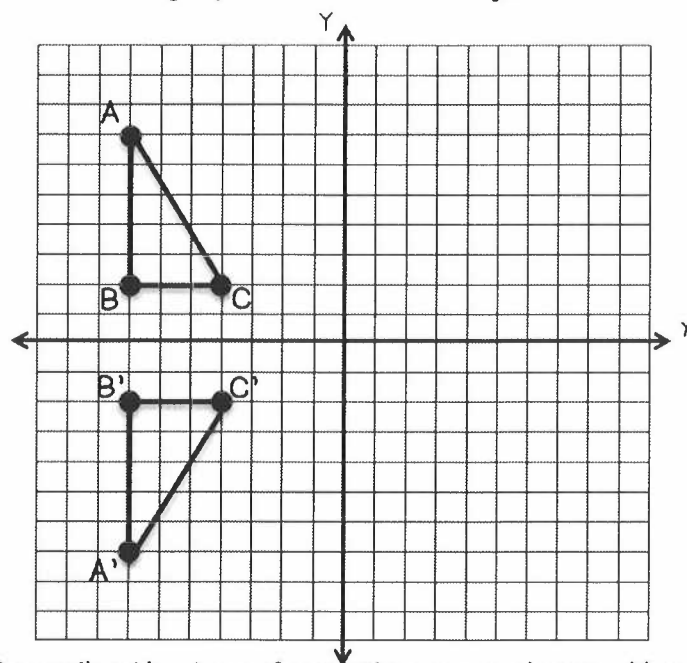
a. Create a table to represent the cost of pizzas at Yum Yum and Perfect Pizza.

b. After how many toppings will the two pizza's cost the same amount?

1. Describe the sequence of transformations from rectangle ABCD to A'B'C'D'.

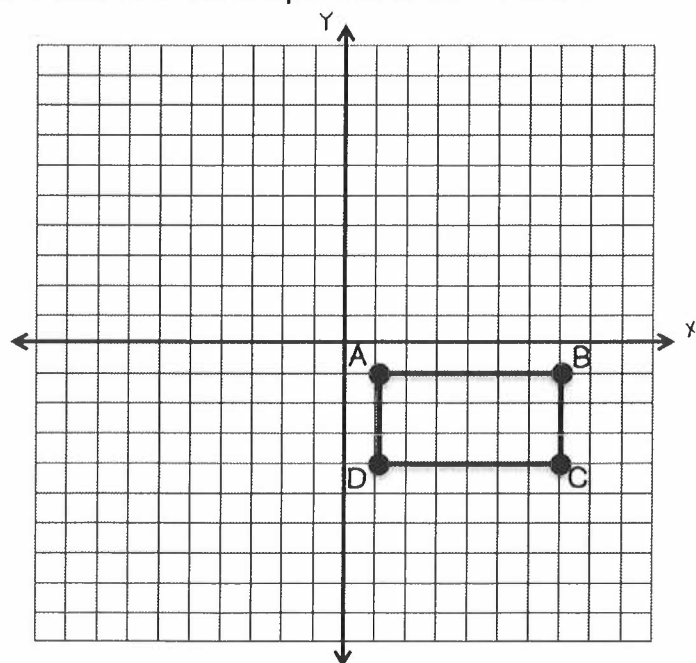


2. Use the graph to answer the question below:

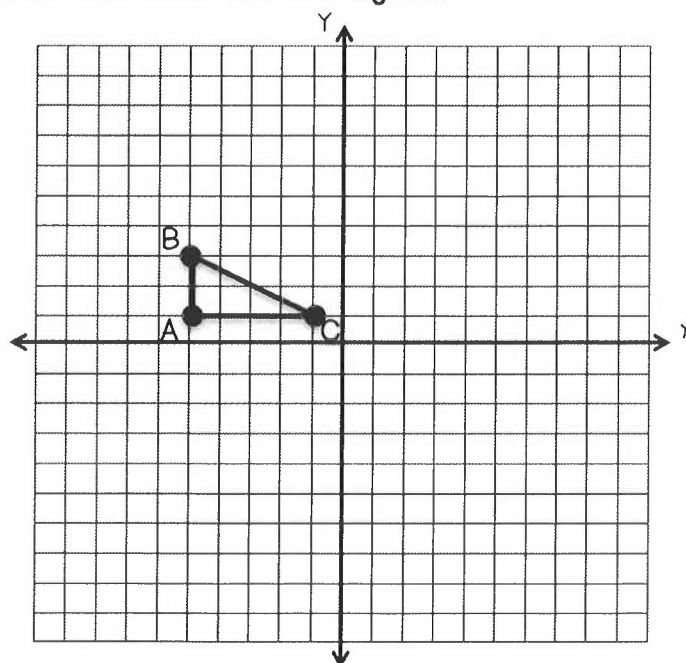


Describe the transformation seen above. How do you know?

1. Translate rectangle ABCD three units to the left and five units up. Label it A'B'C'D'.



2. Figure ABC is dilated by a scale factor of 2. Draw and label the new figure.



A' (,) C' (,)
B' (,)

1. Solve, then answer the questions below.

a. $6x - 8 = -4x - 12$

b. How many solutions does this equation have?

1 none infinite

2. Solve, then answer the questions below.

a. $-3x - 15 = -11 - 3x - 4$

b. How many solutions does this equation have?

1 none infinite

1. Solve, then answer the questions below.

a. $1.5x + 9 = 4x - 6$

b. How many solutions does this equation have?

1 none infinite

2. Solve, then answer the questions below.

a. half a number plus eight is fourteen minus a number

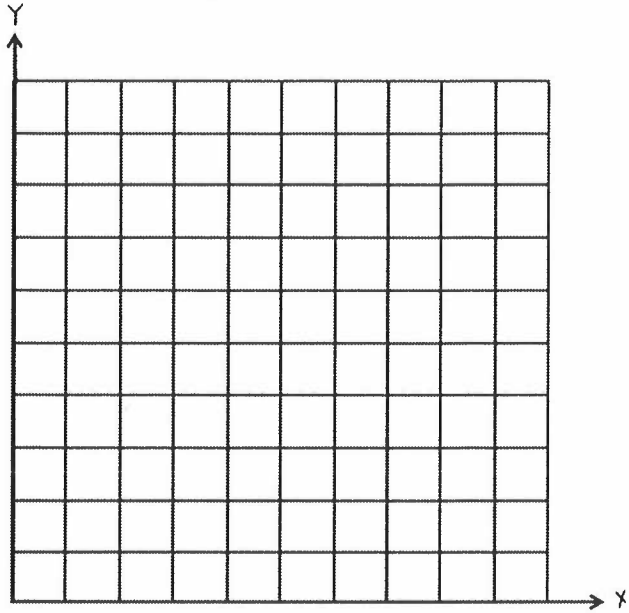
b. How many solutions does this equation have?

1 none infinite

1. A+ Cellular offers a data plan that charges \$2.50 per gig-a-byte plus \$9 fee. Thrifty Talk offers a data plan that charges \$4 per gig-a-byte and no monthly fee. Use the table below to create a graph of these two accounts.

GB	A+ Cellular	Thrifty Talk
0	\$9.00	\$0.00
1	\$11.50	\$4.00
2	\$14.00	\$8.00
3	\$16.50	\$12.00
4	\$19.00	\$16.00

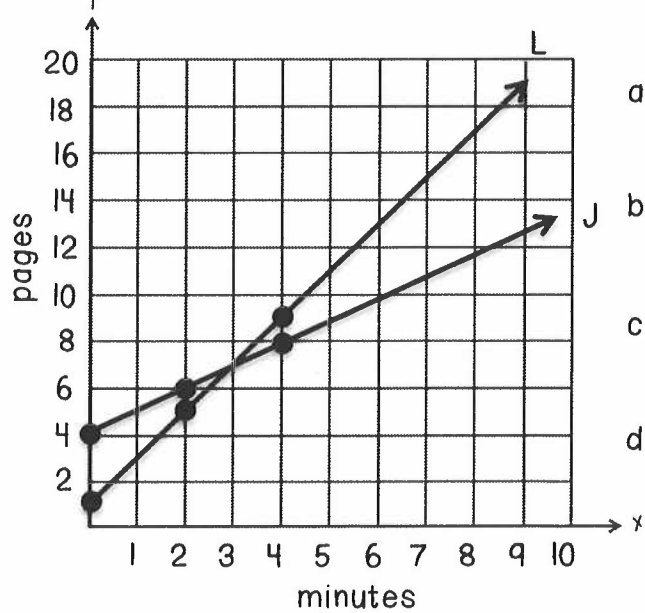
~~\$A~~



- What does x represent?
- What does y represent?
- After how many ~~weeks~~ ^{GB} will they have the same amount in their savings account?

GB

1. Jake and Lucy are reading the same book in class. Use the graph below to write an equation for each student.

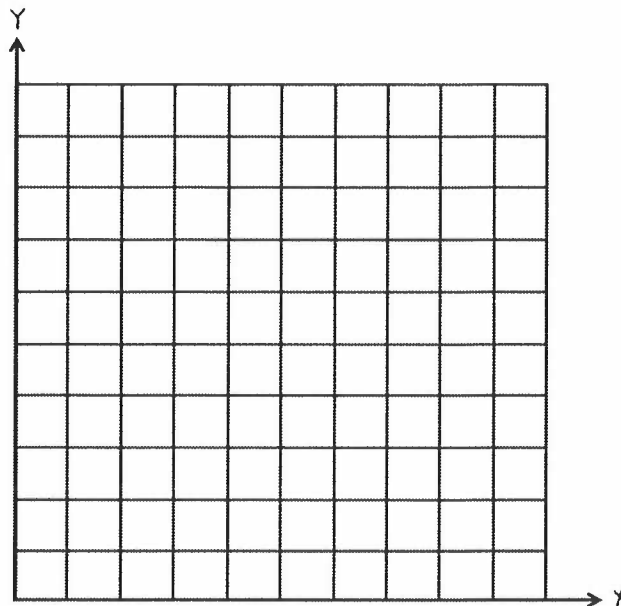


- What does x represent?
- What does y represent?
- Write an equation to represent Lucy.
- Write an equation to represent Jake.
- After how many minutes will Jake and Lucy be on the same page?

1. Sally and her younger sister keep track of their savings accounts. Use the table below to create a graph of these two accounts.

Weeks	Sally	Sister
0	\$4	\$1
1	\$7	\$5
2	\$10	\$9
3	\$13	\$13

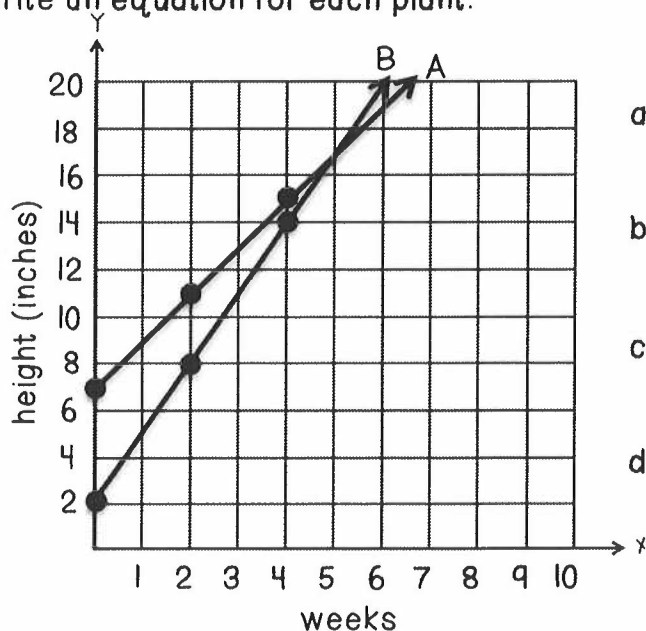
~~SA~~



- What does x represent?
- What does y represent?
- After how many weeks will they have the same amount in their savings account?

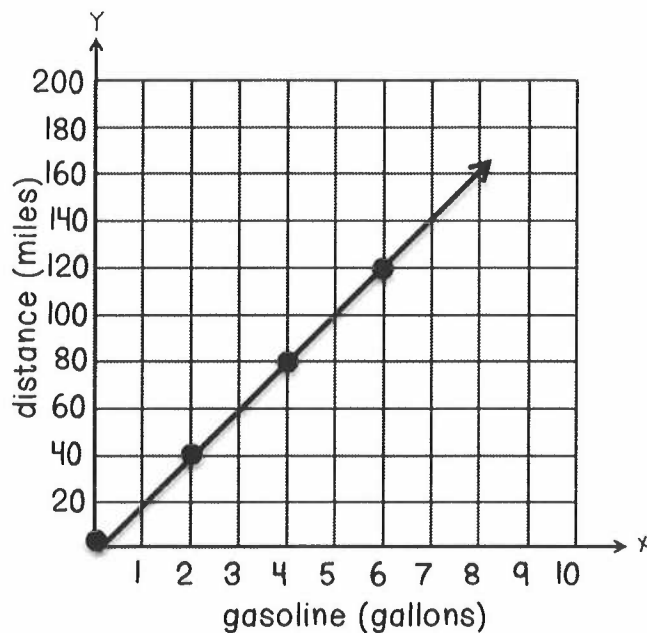
Weeks

1. Amanda is comparing the heights of plants using two different fertilizers. Use the graph below to write an equation for each plant.



- What does x represent?
- What does y represent?
- Write an equation to represent plant A.
- Write an equation to represent plant B.
- After how many weeks will the plants be the same height?

1. Use the graph to answer the question below:



What is the rate/slope?

2. Use the equation to answer the questions below:

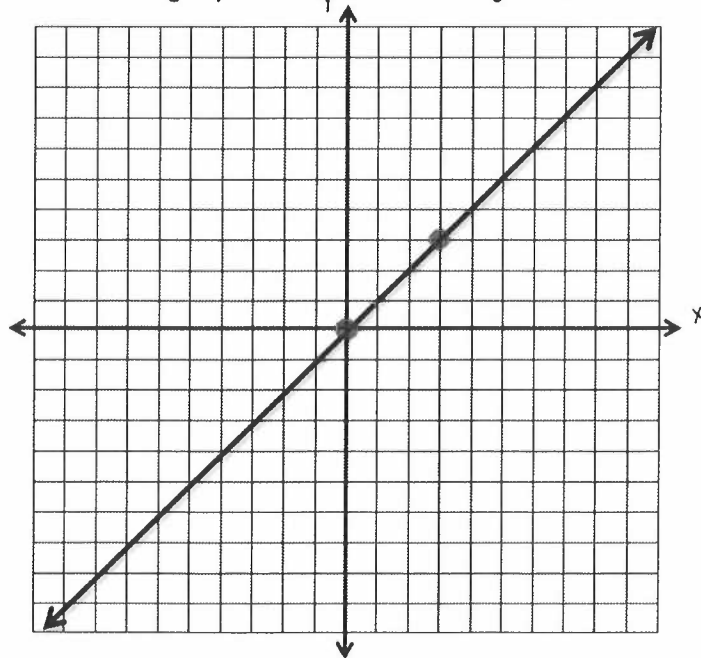
$$y = 17x$$

x is the gallons of gasoline
y is the number of miles

What is the rate/slope?

3. Compare the rate in the graph and the equation, describe your thinking.

1. Use the graph to answer the questions:

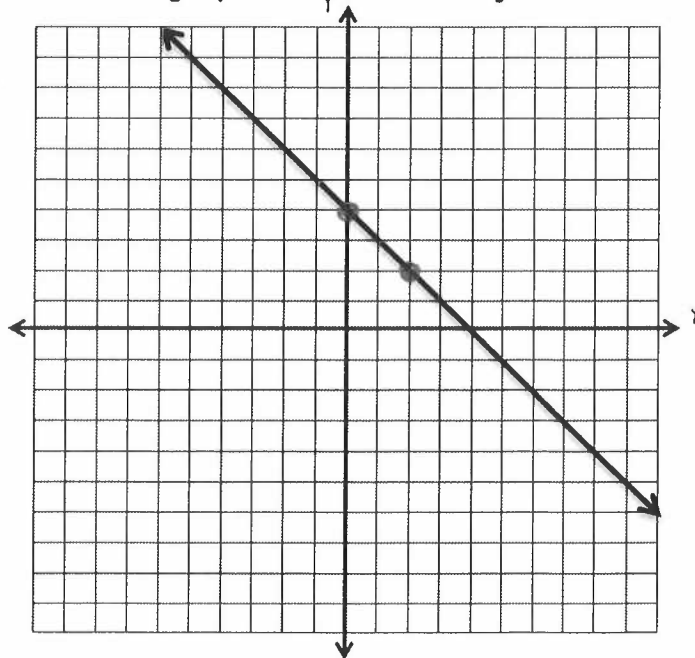


a. $m =$

b. y-intercept =

c. equation:

2. Use the graph to answer the questions:

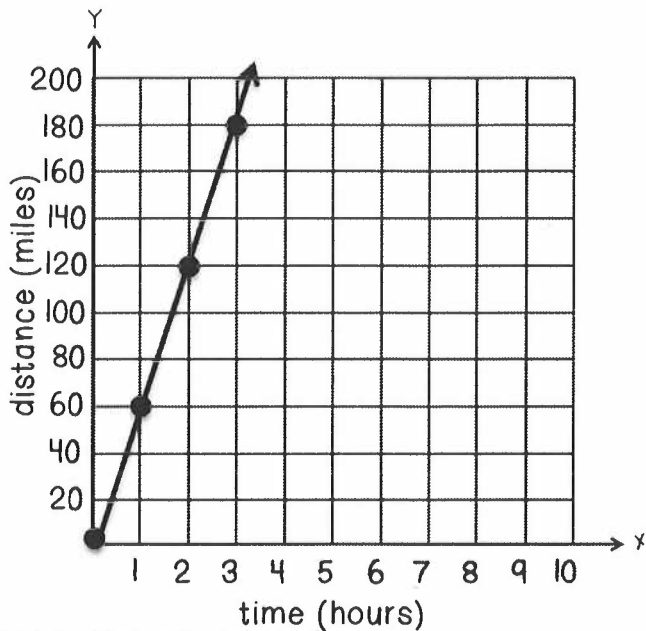


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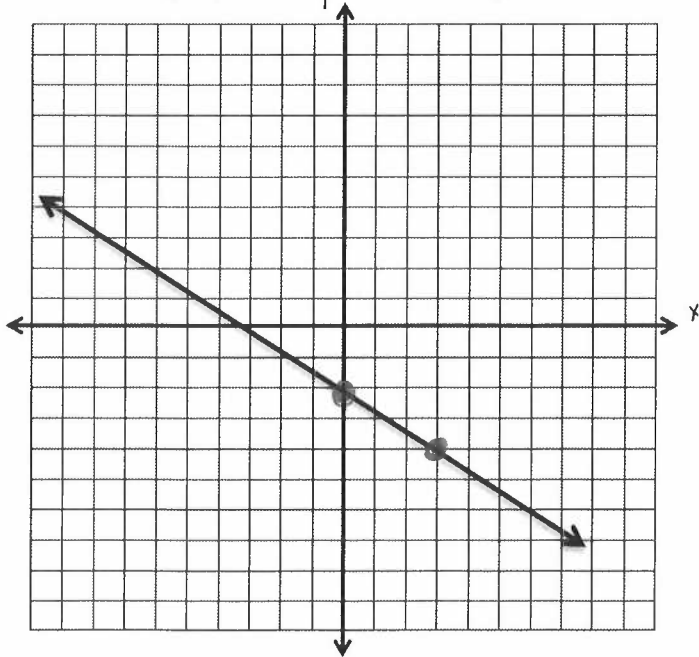
$$y = 65x$$

x is the time in hours
y is the number of miles

What is the rate/slope?

3. Compare the rate in the graph and the equation, describe your thinking.

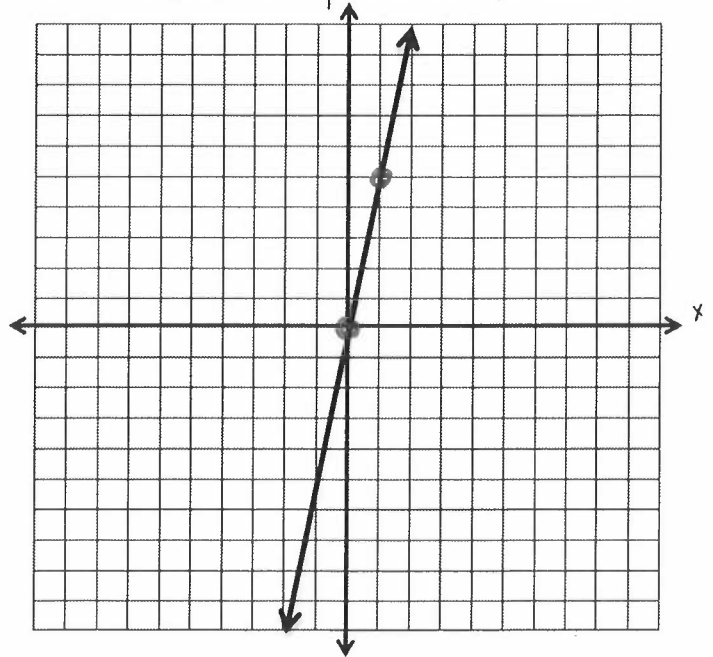
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a. $m =$ b. y-intercept =

c. equation:

2. Use the graph to answer the questions:



a. $m =$ b. y-intercept =

c. equation: