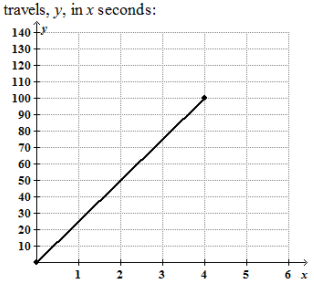
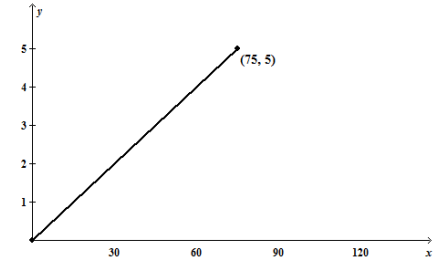
The graph below shows the height in feet above ground which an elevator travels, y, in x seconds:



What is the rate of change for the relationship represented in the graph?

a. 26
b. 30
c. 25
d. 28

The graph shows the number of sprays an automatic air freshener dispenses, y, in x minutes:

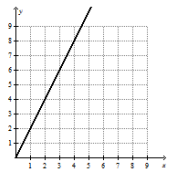


Which expression is equivalent to the rate per minute at which the air freshener dispenses sprays?

a. 2 / 30
b. 2 / 35
c. 1 / 35
d. 1 / 30

The table and the graph below each show a different relationship between the same two variables, x and y:

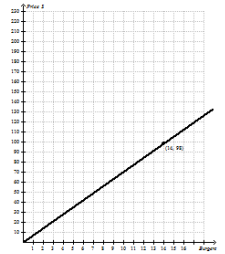
x	y
4	16
5	20
6	24
7	28



How much less would the value of y be on the graph than its value in the table when $x = 14$?

a. 30
b. 28
c. 34
d. 24

The graph shows the price, in dollars, of different numbers of Bonanza Burgers at Herm's store. The table shows the price, in dollars, of different numbers of tacos at the same store.



Number of Tacos	Price of Tacos (dollars)
2	4
5	10
7	14
9	18

How many more dollars is a Bonanza Burger than a taco at Herm's store?

a. $2
b. $3
c. $4
d. $5

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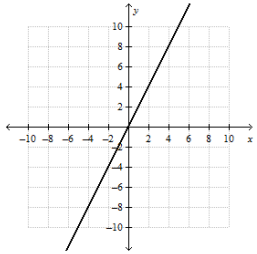
Which equation does the graph below represent?



a. $y = -3x$
b. $y = -2x$
c. $y = 3x$
d. $y = 2x$

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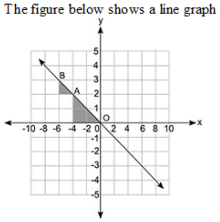
The figure below shows a line graph and two shaded triangles that are similar:



Which statement about the slope of the line is true?

a. The slope from point O to point A is two times the slope of the line from point A to point B.
b. It is $-\frac{1}{2}$ throughout the line.
c. It is -2 throughout the line.
d. The slope from point O to point A is $\frac{1}{2}$ times the slope of the line from point A to point B.

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What is the initial value of the equation shown?
$y = -5x + 2$

a. -2
b. 2
c. -5
d. 5

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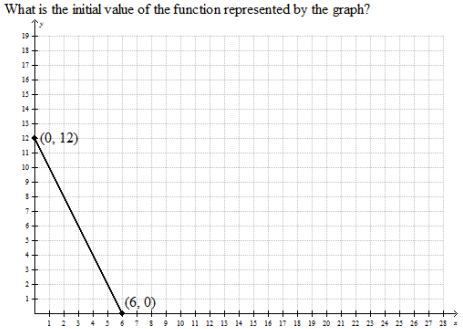
What is the initial value of the function represented by the graph?



a. 12
b. 6
c. 6
d. 0

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Bobby wants to rent a tent. He has to pay a fixed base cost plus a daily rate for renting the tent. The table shows the amount of money, y, in dollars, that Bobby has to pay for renting the tent for x days:

Tent Rental

Number of days (x)	Rent in dollars (y)
0	4
1	7
2	10
3	13
4	16

Which equation best shows the relationship between x and y?

a. $y = 3x + 7$
b. $y = x + 4$
c. $y = x + 7$
d. $y = 3x + 4$

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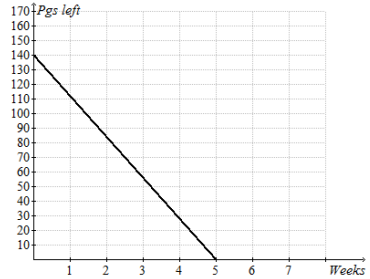
Tommy reads an equal number of pages of a book every week. The graph below shows the number of pages of the book left to read, y, after x weeks:



Which equation best shows the relationship between x and y?

a. $y = -5x + 140$
b. $y = -5x - 28$
c. $y = -28x + 140$
d. $y = -28x + 150$

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Rent-All rents gym equipment for a fixed amount plus a fee based on the number of days for which the equipment is rented. The table shows the total charges, y, in dollars, of renting gym equipment for x number of days:

Equipment Rental

Number of days (x)	Rent in dollars (y)
0	35
1	56
2	77
3	98
4	119

What is the fixed amount charged?

a. $4
b. $35
c. $21
d. $56

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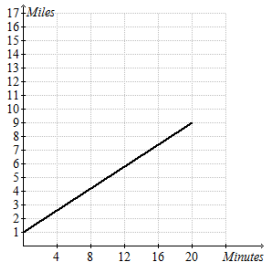
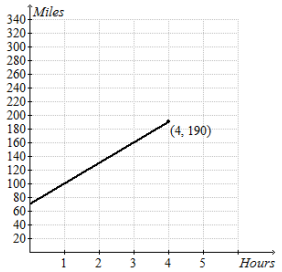
The graph below shows the distance, y, in miles, of a bee from its hive, for a certain amount of time, x, in minutes:



Based on the graph, what is the initial value of the graph and what does it represent?

a. 1 miles per minute; it represents the speed of the bee
b. 0.1 mile per minute; it represents the speed of the bee
c. 1 miles; it represents the original distance of the bee from its hive
d. 0.1 mile; it represents the original distance of the bee from its hive

The graph below shows the distance, y, in miles, of a moving train from a station over a certain amount of time, x, in hours:

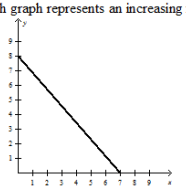


What is the speed, mph (miles per hour), of the train and why?

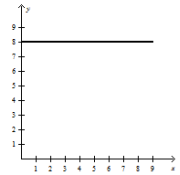
a. 70 mph, because speed is the initial value of the function
b. 120 mph, because speed is the distance traveled in unit time
c. 190 mph, because speed is the distance traveled in four hours
d. 30 mph, because speed is the rate of change of distance

Which graph represents an increasing function?

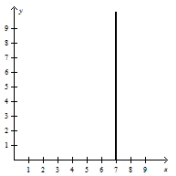
a.



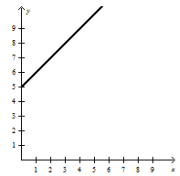
c.



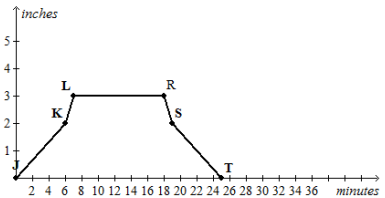
b.



d.



The graph shown represents the water level in Kayla's bathtub as a function of time:

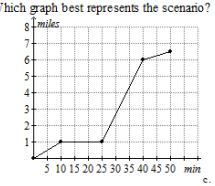


Which description would **best** explain what was happening during Kayla's bath during segment LR on the graph?

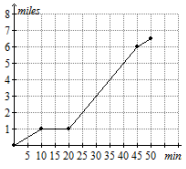
a. Kayla ran water to fill the bathtub.
b. Kayla emptied the bathtub.
c. Kayla got into the bathtub.
d. Kayla soaked in the bathtub.

Bobby walked to the bus stop, then sat and waited 10 minutes for the bus to arrive. He rode the bus for 25 minutes, then walked the last 3 blocks to work. Which graph best represents the scenario?

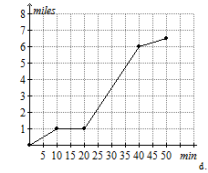
a.



c.



b.



d.