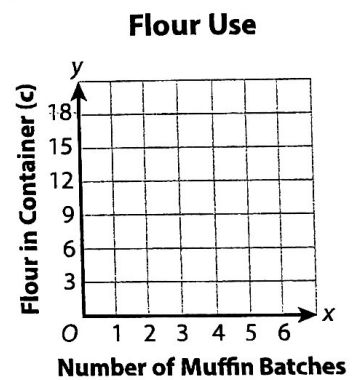
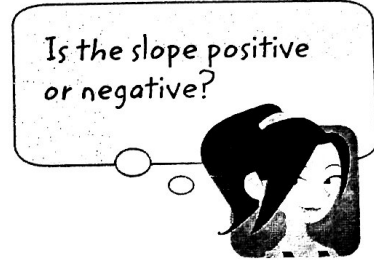


Analyze Linear Functions

Solve the problems.

- 1** Martin has an 18-cup container of flour that he uses for muffins only. He uses 3 cups of the flour for every batch of muffins he makes. Write an equation to show how much flour is left in the container after x batches of muffins. Then graph the function.

Show your work.

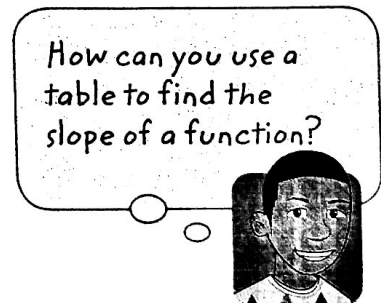


Solution: _____

- 2** Which equation describes the function shown in the table?

x	-2	-1	0	1	2
y	-1	2	5	8	11

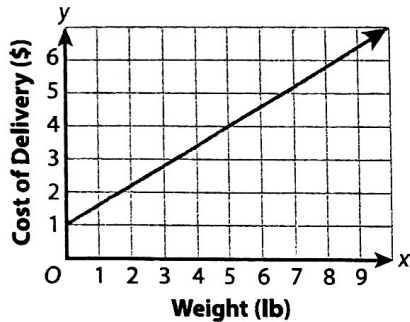
- A $y = x + 5$
- B $y = 3x + 5$
- C $y = \frac{1}{3}x + 5$
- D $y = 5x + 3$



Jacob chose **D** as the correct answer. How did he get that answer?

Solve.

- 3** The cost of having a package delivered by Quick Bicycle Delivery is a function of the weight of the package. The graph of this function is shown.



What does the slope represent in the function?



Tell whether each statement is *True* or *False*.

- a. When the weight is greater than 15 pounds, the cost will be greater than \$10. True False
- b. An equation that represents this graph is $y = x + 0.6$. True False
- c. The slope is 1. True False
- d. The cost of delivery decreases by \$0.60 for each pound the weight decreases. True False

- 4** The lines passing through which pairs of points have a positive y -intercept? Select all that apply.

- A $(-3, 10)$ and $(1, 2)$
- B $(-1, 6)$ and $(0, 2)$
- C $(1, 2)$ and $(3, 4)$
- D $(0, -4)$ and $(3, -2)$
- E $(3, 1)$ and $(5, 2)$

Remember that you can use the formula for the slope when you know two points.

