

Name \_\_\_\_\_ Date \_\_\_\_\_



### Skills Maintenance

#### Writing Functions

#### Activity 1

Write the function for each  $x/y$  table. Be sure to use the correct form with  $y$  on the left. Check your work by substituting in the values of  $x$  and making sure you get the correct value for  $y$ .

1. What is the function? \_\_\_\_\_

$x$	$y$
2	4
3	6
4	8
5	10

Check your work here:

2. What is the function? \_\_\_\_\_

$x$	$y$
1	6
2	12
3	18
4	24

Check your work here:



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## Apply Skills

### Writing Functions for Everyday Situations

#### Activity 1

Write a function for each everyday situation. Then use the function to answer the questions about the situation.

- Micah works at a bakery. His specialty is donuts. He bakes 12 donuts on a tray. Write a function that describes the relationship between the number of donuts and the number of trays. \_\_\_\_\_

#### Questions

- If Micah makes five trays of donuts, how many donuts has he baked?  
\_\_\_\_\_

- How many trays would Micah need to make to get 100 donuts? \_\_\_\_\_

- Katarina gets paid \$10 per hour for math tutoring. Write a function that describes how much she gets paid and how many hours she works. \_\_\_\_\_

#### Questions

- If Katarina earned \$50 in a day, how many hours of tutoring did she do?  
\_\_\_\_\_

- How much does Katarina earn if she tutors for three hours?  
\_\_\_\_\_

- Elijah rides his bike in the evenings to prepare for a bike race. It takes him an hour to ride five miles. Write a function that describes the relationship between the number of miles and the number of hours. \_\_\_\_\_

#### Questions

- How far can Elijah ride in two hours?  
\_\_\_\_\_

- How many miles would Elijah travel if he rode his bike for four hours?  
\_\_\_\_\_

- Raj makes a pitcher of iced tea each morning. He gets four 8-ounce glasses of tea from the pitcher. Write a function that describes the relationship between the number of pitchers and the number of glasses of tea. \_\_\_\_\_

#### Questions

- If Raj makes three pitchers of tea, how many 8-oz glasses of tea is that?  
\_\_\_\_\_

- If Raj drank six glasses of tea one day, how many pitchers did he need to make that day?  
\_\_\_\_\_

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## Problem-Solving Activity

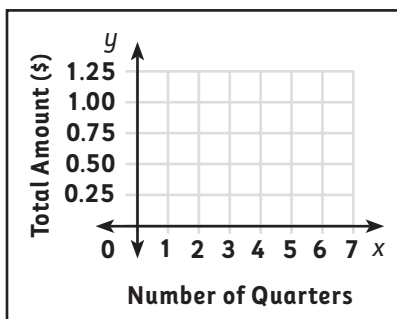
### Graphing Linear Functions

You are given a situation and an  $x/y$  table in each problem. Use the data in the tables to write the functions, then draw them on the coordinate graphs.

- Each quarter gives you time on the parking meter. The more quarters you put into the meter, the more time you get.

Let  $x$  = the number of quarters and  $y$  = the total amount you put in the meter.

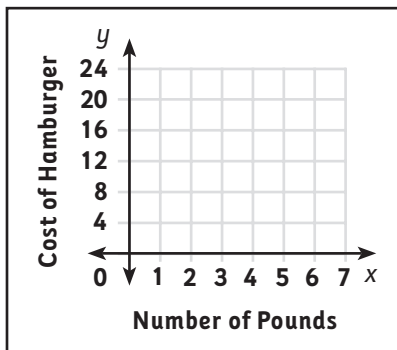
$x$	$y$
1	\$0.25
2	\$0.50
3	\$0.75
4	\$1.00
5	\$1.25



- The price of hamburger in the store is \$4 per pound. Hamburger is sold in different sized packages, and what you pay depends on how much the package weighs.

Let  $x$  = the number of pounds and  $y$  = the total cost of the hamburger.

$x$	$y$
1	\$4
2	\$8
3	\$12
4	\$16
5	\$20
6	\$24



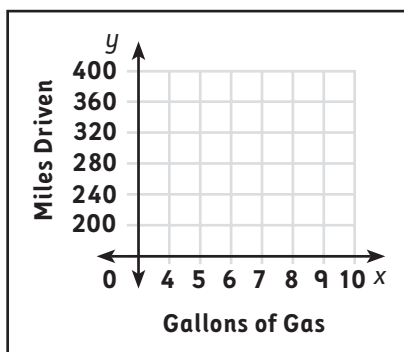


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3. As gas prices get higher, people buy more small cars. Some small cars get 40 miles per gallon of gasoline. This information helps you plan how far you can drive on the number of gallons of gas in your car.

Let  $x$  = the number of gallons of gas and  $y$  = the total miles you can drive.

$x$	$y$
5	200
6	240
7	280
8	320



**mBook Reinforce Understanding**  
 Use the mBook *Study Guide* to review lesson concepts.