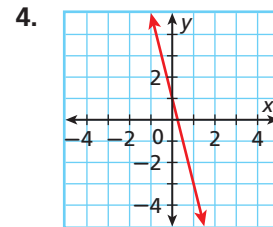
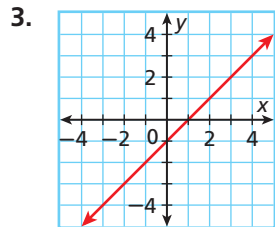
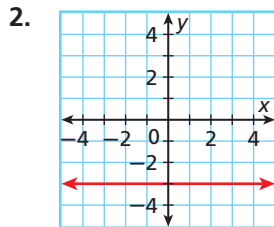




**GUIDED PRACTICE**

1. **Vocabulary** Is the *linear equation*  $3x - 2 = y$  in standard form? Explain.

**SEE EXAMPLE 1** Identify whether each graph represents a function. Explain. If the graph does represent a function, is the function linear?



**SEE EXAMPLE 2** Tell whether the given ordered pairs satisfy a linear function. Explain.

5. 

x	5	4	3	2	1
y	0	2	4	6	8

6. 

x	1	4	9	16	25
y	1	2	3	4	5

7.  $\{(0, 5), (-2, 3), (-4, 1), (-6, -1), (-8, -3)\}$   
 8.  $\{(2, -2), (-1, 0), (-4, 1), (-7, 3), (-10, 6)\}$

**SEE EXAMPLE 3** Tell whether each function is linear. If so, graph the function.

9.  $2x + 3y = 5$       10.  $2y = 8$       11.  $\frac{x^2 + 3}{5} = y$       12.  $\frac{x}{5} = \frac{y}{3}$

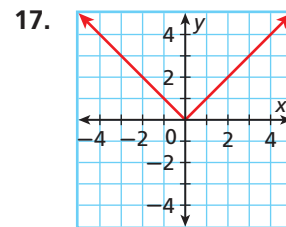
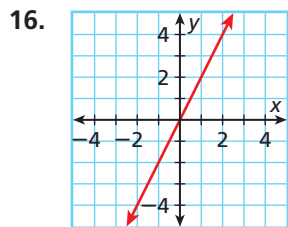
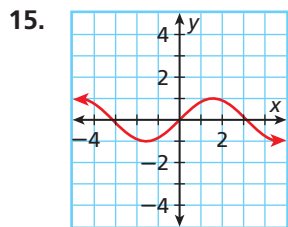
- SEE EXAMPLE 4** 13. **Transportation** A train travels at a constant speed of 75 mi/h. The function  $f(x) = 75x$  gives the distance that the train travels in  $x$  hours. Graph this function and give its domain and range.  
 14. **Entertainment** A movie rental store charges a \$6.00 membership fee plus \$2.50 for each movie rented. The function  $f(x) = 2.50x + 6$  gives the cost of renting  $x$  movies. Graph this function and give its domain and range.

**PRACTICE AND PROBLEM SOLVING**

**Independent Practice**

For Exercises	See Example
15–17	1
18–20	2
21–24	3
25	4

Identify whether each graph represents a function. Explain. If the graph does represent a function, is the function linear?



Tell whether the given ordered pairs satisfy a linear function. Explain.

18. 

x	-3	0	3	6	9
y	-2	-1	0	2	4

19. 

x	-1	0	1	2	3
y	-3	-2	-1	0	1

20.  $\{(3, 4), (0, 2), (-3, 0), (-6, -2), (-9, -4)\}$

