

TEKS 2A.4.A



LESSON

2-3

## Practice B

### Graphing Linear Functions

Determine whether each data set could represent a linear function.

1. 

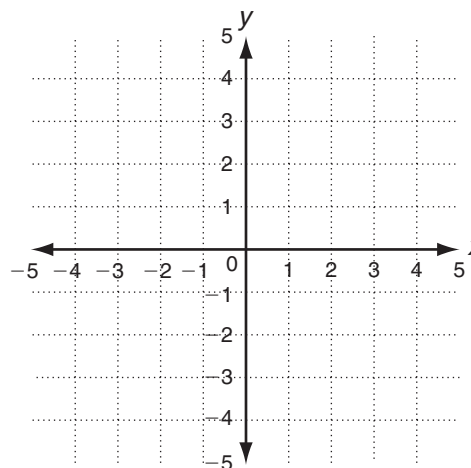
$x$	9	7	5	3
$f(x)$	2	5	10	15

2. 

$x$	0.5	1	1.5	2
$f(x)$	9	6	3	0

Use the coordinate plane at right to graph and label each line.

- Line  $a$  has a slope of  $-2$  and passes through  $(1, 4)$ .
- Line  $b$  has a slope of  $1$  and passes through  $(-4, -2)$ .
- Line  $c$  has a slope of  $\frac{2}{3}$  and passes through  $(3, -2)$ .
- Line  $d$  has a slope of  $-\frac{5}{4}$  and passes through  $(-1, 0)$ .



Find the intercepts of each line and graph and label the line.

7. line  $e$ :  $5x + y = -5$

\_\_\_\_\_

8. line  $f$ :  $6x + 2y = 6$

\_\_\_\_\_

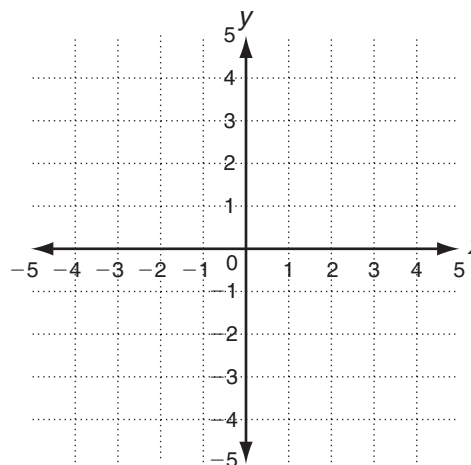
Write each function in slope-intercept form. Then graph and label the function.

9. line  $g$ :  $-3x - y = 9$

\_\_\_\_\_

10. line  $h$ :  $4x + 3y = 6$

\_\_\_\_\_



Determine whether each line is vertical or horizontal.

11.  $x = -5$

\_\_\_\_\_

12.  $y = \frac{8}{3}$

\_\_\_\_\_

13.  $x = 4.6$

\_\_\_\_\_

TEKS 2A.4.A



# Practice B

## Graphing Linear Functions

Determine whether each data set could represent a linear function.

1. 

$x$	9	7	5	3
$f(x)$	2	5	10	15

Nonlinear

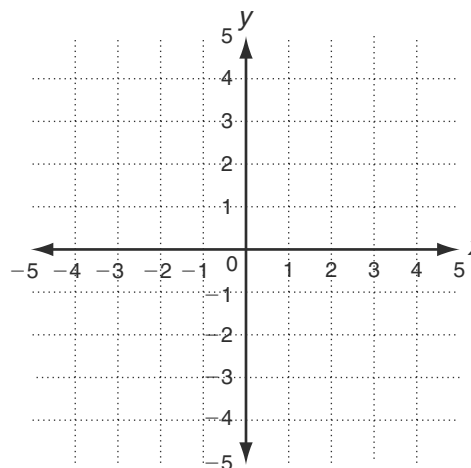
2. 

$x$	0.5	1	1.5	2
$f(x)$	9	6	3	0

Linear

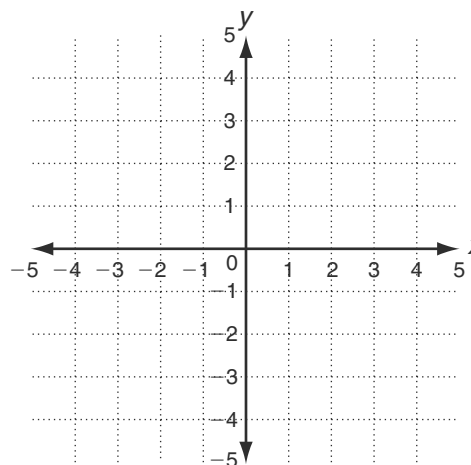
Use the coordinate plane at right to graph and label each line.

- Line  $a$  has a slope of  $-2$  and passes through  $(1, 4)$ .
- Line  $b$  has a slope of  $1$  and passes through  $(-4, -2)$ .
- Line  $c$  has a slope of  $\frac{2}{3}$  and passes through  $(3, -2)$ .
- Line  $d$  has a slope of  $\frac{-5}{4}$  and passes through  $(-1, 0)$ .



Find the intercepts of each line and graph and label the line.

- line  $e$ :  $5x + y = -5$   
 $x$ -intercept =  $-1$ ;  $y$ -intercept =  $-5$
- line  $f$ :  $6x + 2y = 6$   
 $x$ -intercept =  $1$ ;  $y$ -intercept =  $3$



Write each function in slope-intercept form. Then graph and label the function.

- line  $g$ :  $-3x - y = 9$   
 $y = -3x - 9$
- line  $h$ :  $4x + 3y = 6$   
 $y = \frac{-4x}{3} + 2$

Determine whether each line is vertical or horizontal.

- |                 |                       |                 |
|-----------------|-----------------------|-----------------|
| 11. $x = -5$    | 12. $y = \frac{8}{3}$ | 13. $x = 4.6$   |
| <u>Vertical</u> | <u>Horizontal</u>     | <u>Vertical</u> |