

## Practice

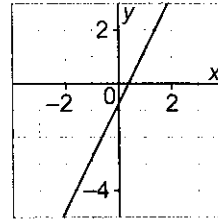
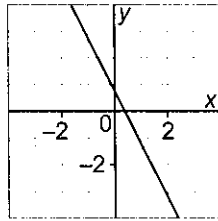
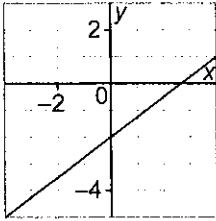
1. A line has slope  $-2$  and  $y$ -intercept  $\frac{3}{4}$ .

Circle the correct equation for this line.

a)  $y = \frac{3}{4}x - 2$

b)  $y = -2x + \frac{3}{4}$

c)  $y = 2x - \frac{3}{4}$



2. For each equation, write the slope and  $y$ -intercept of its graph.

a)  $y = 2x + 6$

Slope = \_\_\_\_\_

$y$ -intercept = \_\_\_\_\_

b)  $y = -\frac{1}{2}x + \frac{3}{2}$

Slope = \_\_\_\_\_

$y$ -intercept = \_\_\_\_\_

c)  $y = \frac{1}{4}x$

Slope = \_\_\_\_\_

$y$ -intercept = \_\_\_\_\_

d)  $y = -x + 1$

Slope = \_\_\_\_\_

$y$ -intercept = \_\_\_\_\_

3. Write an equation for the line that:

- a) has slope  $-2$  and  $y$ -intercept  $3$

Use:  $y = mx + b$

Substitute:  $m =$  \_\_\_\_\_ and  $b =$  \_\_\_\_\_

An equation is: \_\_\_\_\_

- b) has slope  $\frac{1}{4}$  and  $y$ -intercept  $-2$

$m =$  \_\_\_\_\_ and  $b =$  \_\_\_\_\_

An equation is: \_\_\_\_\_

- c) passes through  $S(0, -3)$  and has slope  $4$

The point  $S$  has  $x$ -coordinate \_\_\_\_\_  
and  $y$ -coordinate \_\_\_\_\_.

So, the  $y$ -intercept is: \_\_\_\_\_

$m =$  \_\_\_\_\_ and  $b =$  \_\_\_\_\_

An equation is: \_\_\_\_\_

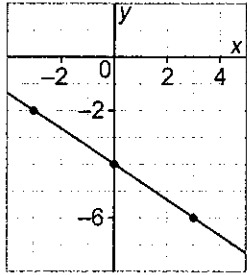
- d) passes through the origin and has slope  $-\frac{3}{4}$

The  $y$ -intercept is: \_\_\_\_\_

$m =$  \_\_\_\_\_ and  $b =$  \_\_\_\_\_

An equation is: \_\_\_\_\_

4. Write an equation to describe this line.



Rise = \_\_\_\_\_

Run = \_\_\_\_\_

Slope,  $m =$  \_\_\_\_\_

$y$ -intercept,  $b =$  \_\_\_\_\_

In  $y = mx + b$ ,

substitute:  $m =$  \_\_\_\_\_ and  $b =$  \_\_\_\_\_

An equation is: \_\_\_\_\_

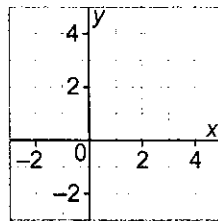
5. Graph the line with each given  $y$ -intercept and slope.

Write an equation of the line.

a)  $y$ -intercept is 1, slope is  $-\frac{3}{2}$

The rise is \_\_\_\_\_.

The run is \_\_\_\_\_.

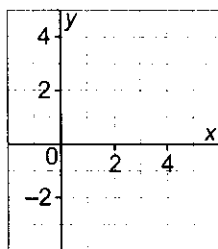


In  $y = mx + b$ ,

substitute:  $m =$  \_\_\_\_\_ and  $b =$  \_\_\_\_\_

An equation is: \_\_\_\_\_

b)  $y$ -intercept is  $-3$ , slope is  $\frac{7}{4}$



An equation is: \_\_\_\_\_