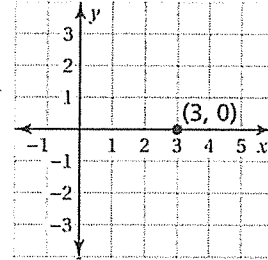
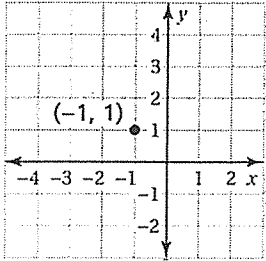


4.7 Practice AB

Use the point-slope form to write an equation of the line with the given slope that passes through the given point.

1. $m = 3$

2. $m = -\frac{2}{3}$



Write in point-slope form an equation of the line that passes through the given point and has the given slope.

3. $(4, -2); m = \frac{1}{4}$

4. $(-3, 5); m = -\frac{4}{3}$

5. $(-1, -5); m = 4$

Write in slope-intercept form an equation of the line that passes through the given points.

6. $(-3, -4), (6, -1)$

7. $(-2, -9), (1, 6)$

8. After a laptop is purchased, its value decreases by \$150 each year. After 2 years, the laptop is worth \$600.

a. Write an equation that represents the value V (in dollars) of the laptop x years after it is purchased.

b. What was the original value of the laptop?

c. What is the value of the laptop 5 years after it is purchased?

Write in point-slope form an equation of the line that passes through the given point and has the given slope.

9. $(-6, 3); m = \frac{1}{3}$

10. $(-2, 8); m = -3$

Write in slope-intercept form an equation of the line that passes through the given points.

11. $(2, 3), (3, 7)$

12. $(-5, -8), (10, 4)$

13. $(-6, 4), (6, 0)$

14. You are pulling a kite back to the ground at a rate of 2 feet per second. After 4 seconds, the kite is 16 feet above the ground.

a. Write an equation that represents the height y (in feet) above the ground after x seconds.

b. At what height was the kite when you started pulling it in?

c. When does the kite touch the ground?