

**LESSON**  
**4.3****Practice A**

For use with the lesson "Write Linear Equations in Point-Slope Form"

**Find the slope of the line that passes through the given points.**

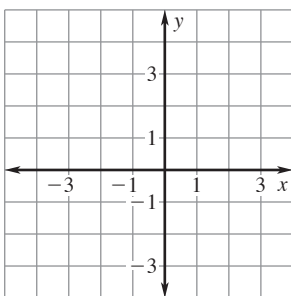
1. (6, 10), (4, 1)                      2. (-2, 5), (7, 12)                      3. (-3, -3), (5, -2)
4. (3, 9), (-2, 6)                      5. (-7, 1), (-1, 7)                      6. (10, -2), (7, -2)

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

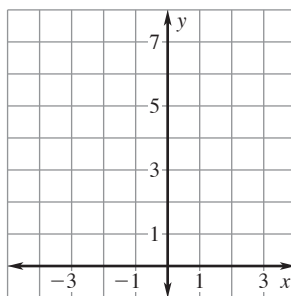
7. (2, 2);  $m = 5$                       8. (7, 3);  $m = -1$                       9. (0, -4);  $m = 3$
10. (-1, 7);  $m = 4$                       11. (-8, -5);  $m = 6$                       12. (4, -9);  $m = 2$

**Graph the equation.**

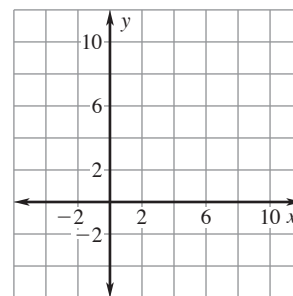
13.  $y - 4 = 2(x - 1)$



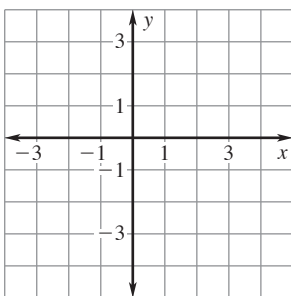
14.  $y - 1 = 3(x + 2)$



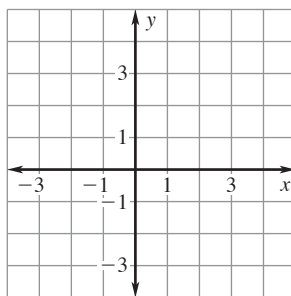
15.  $y - 5 = -1(x - 4)$



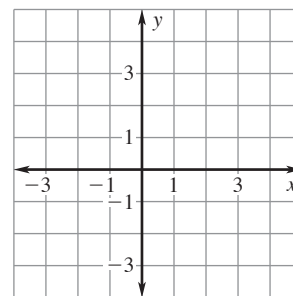
16.  $y + 4 = 1(x + 2)$



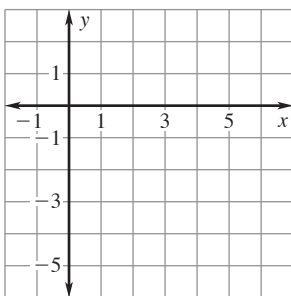
17.  $y - 2 = \frac{1}{2}(x - 1)$



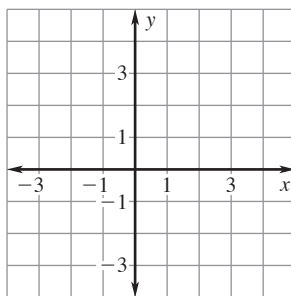
18.  $y + 1 = -\frac{1}{3}(x - 2)$



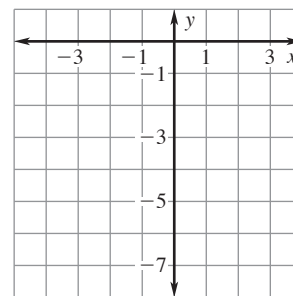
19.  $y + 1 = \frac{2}{3}(x - 5)$



20.  $y - 1 = -\frac{4}{3}(x - 1)$

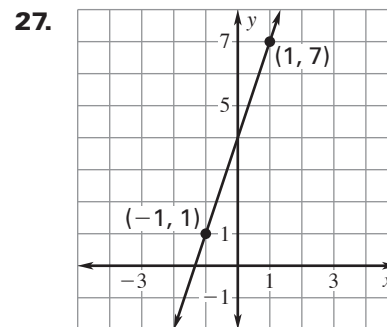
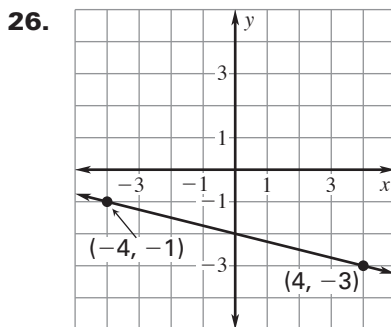
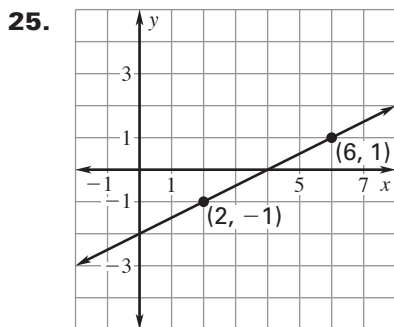
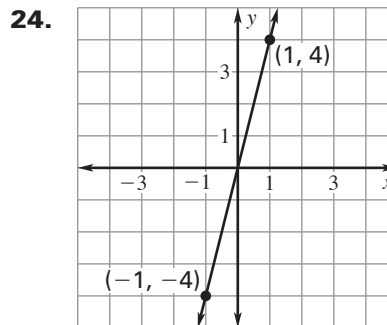
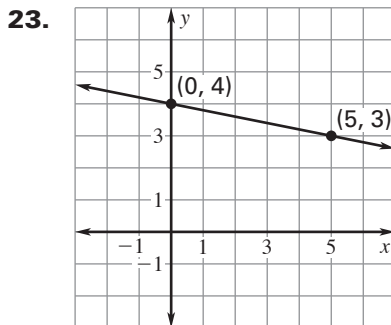
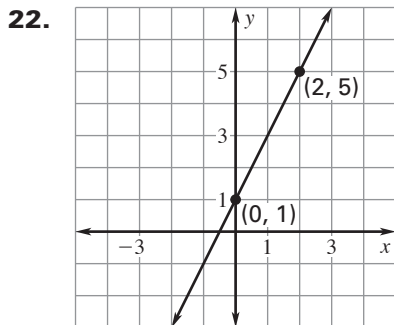


21.  $y + 6 = -5x$



**LESSON**  
**4.3**
**Practice A** *continued*
*For use with the lesson "Write Linear Equations in Point-Slope Form"*

**Write an equation of the line shown. Use the right-hand point to write the equation.**



**Write an equation of the line that passes through the given points. Use the first point to write the equation.**

28.  $(0, 0), (4, -12)$

29.  $(4, 1), (7, 12)$

30.  $(0, 5), (3, 0)$

31.  $(3, -2), (-2, 3)$

32. **Hotel Rates** You rent a hotel room for \$45 a night. The hotel adds a charge for using its parking lot to the total bill. After staying at the hotel for 3 nights, your total bill is \$150.

- How much of your bill was for the parking fee?
- Write an equation that gives your total bill (in dollars) as a function of the number of nights you stay in the room.
- How much does it cost to stay at the hotel for 7 nights?
- If your bill was \$555, how many nights did you stay at the hotel?

33. **Organic Crops** From 1997 to 2001, the number of certified organic growers in the United States increased by about 491.6 growers per year. In 2000, there were about 6515 certified organic growers.

- Write an equation that gives the number of certified organic growers as a function of the number of years since 1997.
- How many certified organic growers were there in 2001?