

LESSON
5.3**Practice A**

For use with pages 302–308

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

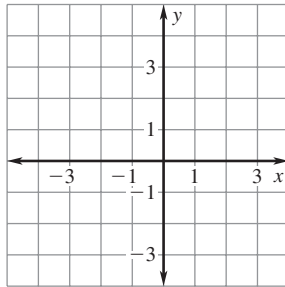
1. (6, 10), (4, 1) 2. (-2, 5), (7, 12) 3. (-3, -3), (5, -2)
4. (3, 9), (-2, 6) 5. (-7, 1), (-1, 7) 6. (10, -2), (7, -2)

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

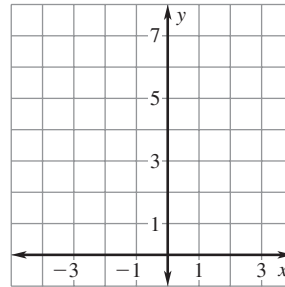
7. (2, 2); $m = 5$ 8. (7, 3); $m = -1$ 9. (0, -4); $m = 3$
10. (-1, 7); $m = 4$ 11. (-8, -5); $m = 6$ 12. (4, -9); $m = 2$

Graph the equation.

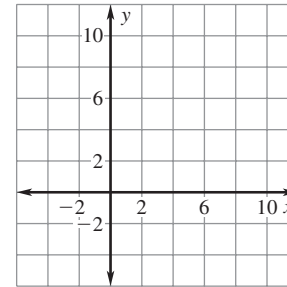
13. $y - 4 = 2(x - 1)$



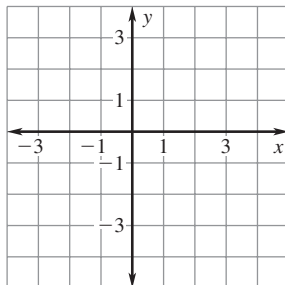
14. $y - 1 = 3(x + 2)$



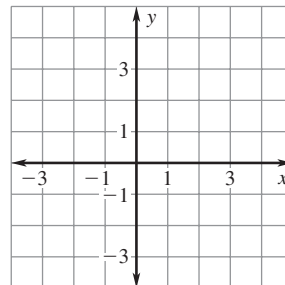
15. $y - 5 = -1(x - 4)$



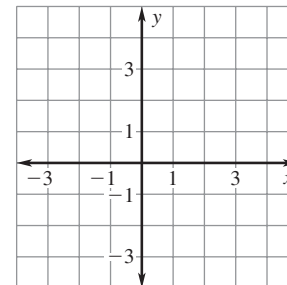
16. $y + 4 = 1(x + 2)$



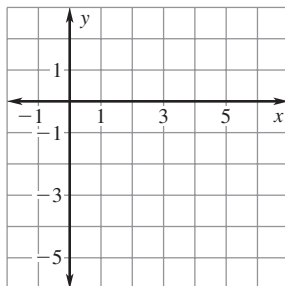
17. $y - 2 = \frac{1}{2}(x - 1)$



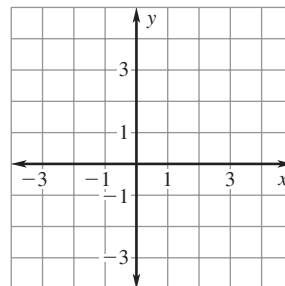
18. $y + 1 = -\frac{1}{3}(x - 2)$



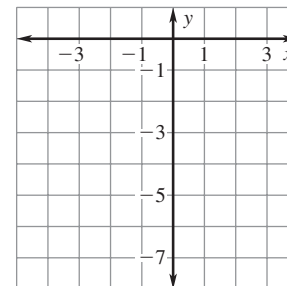
19. $y + 1 = \frac{2}{3}(x - 5)$



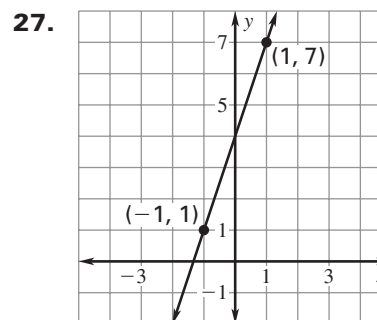
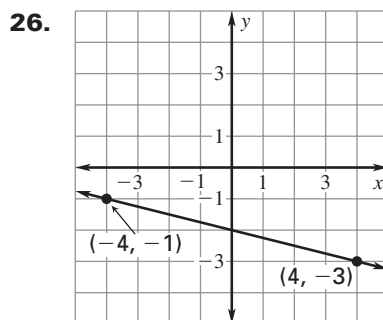
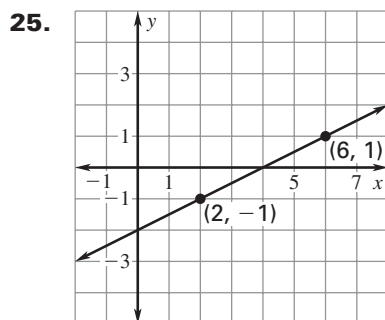
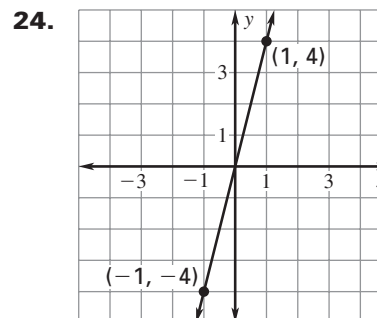
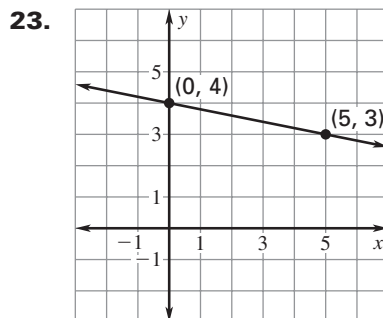
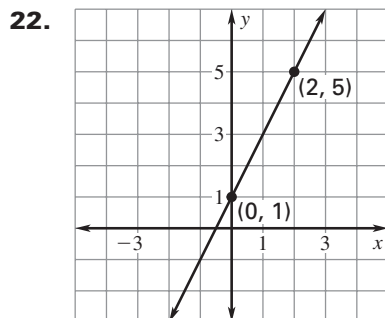
20. $y - 1 = -\frac{4}{3}(x - 1)$



21. $y + 6 = -5x$



LESSON
5.3
Practice A *continued*
 For use with pages 302–308

Write an equation of the line shown.

Write an equation of the line that passes through the given points.

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?