LESSON **8.5**

Name _____ Date _____

# Practice B

For use with pages 412–417

**Identify the slope and y-intercept of the line with the given equation.**

**1.** $y = -\frac{1}{3}x + 6$

**2.** $y = \frac{3}{4}x$

**3.** $y - 4x = -8$

**4.** $3x - y = 12$

**5.** $2x + 6y = 12$

**6.** $3x + 5y - 15 = 0$

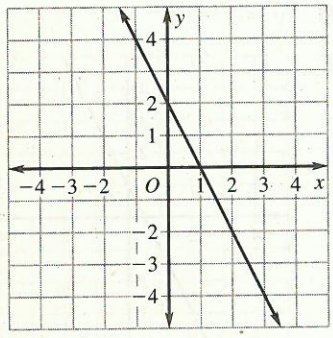
**Match the equation with its graph.**

**7.** $y = \frac{1}{2}x + 2$

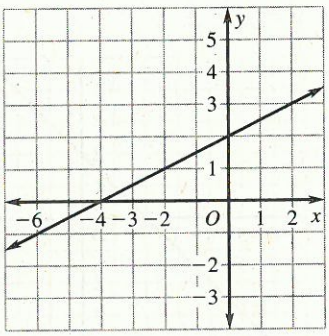
**8.** $y = 2x + \frac{1}{2}$

**9.** $y = -2x + 2$

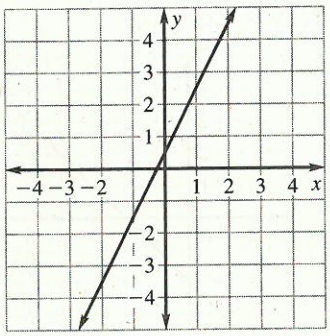
**A.**



**B.**



**C.**



**Identify the slope and y-intercept of the line with the given equation. Use the slope and y-intercept to graph the equation.**

**10.** $y = \frac{5}{4}x + 1$

**11.** $y - \frac{3}{2}x = 3$

**12.** $3y + 4x = 24$

**13.** $x - 3y = 9$

**For the line with the given equation, find the slope of a parallel line and the slope of a perpendicular line.**

**14.** $y = 12x - 1$

**15.** $y = \frac{6}{5}x + 144$

**16.** $y - 7 = 0$

**17.** $4y - 4x = 16$

**18.** $8y + 3x - 32 = 0$

**19.** $4x + 6y = 9$

**20.** Forest rangers measure a depth of 82 inches of snow on a mountain peak at 8:00 A.M. Snow is expected to fall at a steady rate of $\frac{3}{4}$ inch per hour throughout the day.

**a.** Write an equation that approximates the depth $y$ of snow on the mountain peak $x$ hours after 8:00 A.M.

**b.** The rangers plan to start a controlled avalanche when the depth of snow on the peak reaches 85 inches. At what time will this be?