

Write an equation of the line in slope-intercept form. (Section 2.5)



Ouiz

2.5-2.7





Write in point-slope form an equation of the line that passes through the given point and has the given slope. *(Section 2.6)*

4. (1, 3); m = 2**5.** (-3, -2); $m = \frac{1}{3}$ **6.** (-1, 4); m = -1**7.** (8, -5); $m = -\frac{1}{8}$

Write in slope-intercept form an equation of the line that passes through the given points. (*Section 2.6*)

- **8.** $\left(0, -\frac{2}{3}\right)\left(-3, -\frac{2}{3}\right)$ **9.** (4, 0), (0, 4)
- **10.** Write an equation of the line that passes through (2, -5) and is (a) parallel to and (b) perpendicular to the line $y = \frac{1}{3}x + 4$. *(Section 2.6)*
- **11. CONSTRUCTION** A construction crew is extending a highway sound barrier that is 13 miles long. The crew builds $\frac{1}{2}$ mile per week. Write an equation for the length *y* (in miles) of the barrier after *x* weeks. (*Section 2.5*)
- **12. FISH POND** You are draining a fish pond. The amount *y* (in liters) of water remaining after *x* hours is y = -60x + 480. (a) Graph the equation. (b) Interpret the *x* and *y*-intercepts. *(Section 2.7)*
- **13. WATER** A recreation department bought bottled water to sell at a fair. The graph shows the number *y* of bottles remaining after each hour *x*. (*Section 2.7*)
 - **a.** Find the slope and *y*-intercept.
 - **b.** Write an equation of the line.
 - **c.** The fair started at 10 A.M. When did the recreation department run out of bottled water?

