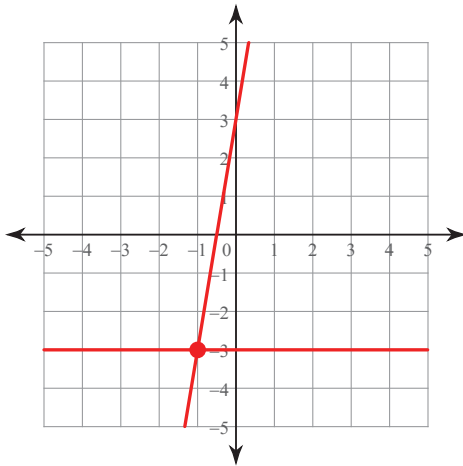


Chapter 3 Practice Test

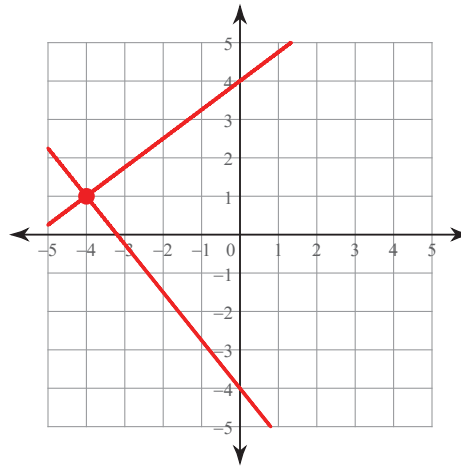
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Solve each system by graphing.

$$\begin{aligned} 1) \quad & y = 6x + 3 \\ & y = -3 \end{aligned}$$

 $(-1, -3)$

$$\begin{aligned} 2) \quad & 5x + 4y = -16 \\ & 3x - 4y = -16 \end{aligned}$$

 $(-4, 1)$ **Solve each system by substitution.**

$$\begin{aligned} 3) \quad & -5x + y = -14 \\ & -3x + 6y = 24 \end{aligned}$$

 $(4, 6)$

$$\begin{aligned} 4) \quad & 4x - 2y = -2 \\ & -5x + 5y = 10 \end{aligned}$$

 $(1, 3)$ **Solve each system by elimination.**

$$\begin{aligned} 5) \quad & 4x + 10y = 22 \\ & 7x - 20y = 1 \end{aligned}$$

 $(3, 1)$

$$\begin{aligned} 6) \quad & 2x + 2y = 12 \\ & 3x + 3y = 15 \end{aligned}$$

No solution

$$\begin{aligned} 7) \quad & -3x + y + z = -2 \\ & -4x - 2y + 2z = 2 \\ & -x - 3y - 2z = 13 \end{aligned}$$

 $(-1, -2, -3)$

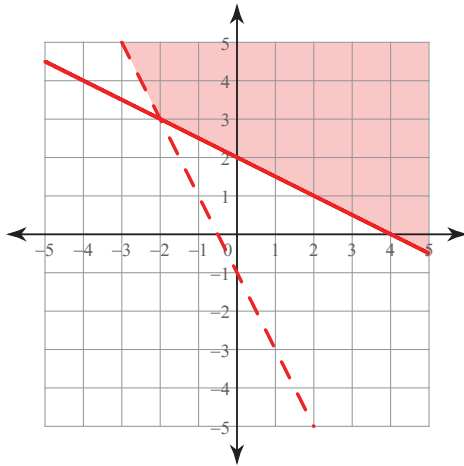
$$\begin{aligned} 8) \quad & x - 4y = -15 \\ & -x + y - 3z = -6 \\ & x - 3y + 3z = -2 \end{aligned}$$

 $(1, 4, 3)$

Sketch the solution to each system of inequalities.

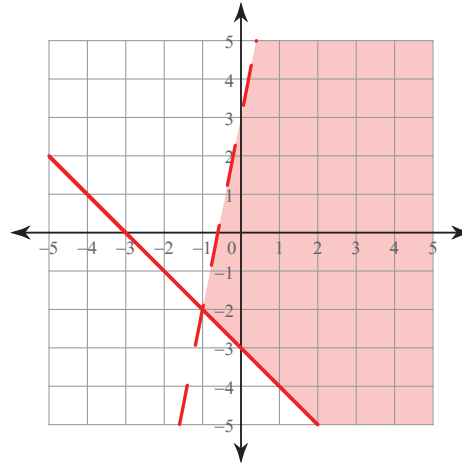
9) $y \geq -\frac{1}{2}x + 2$

$y > -2x - 1$



10) $5x - y > -3$

$x + y \geq -3$



Solve each equation.

11) $|4n - 8| = 48$

$\{14, -10\}$

Write the slope-intercept form of the equation of the line through the given point with the given slope.

12) through: $(-2, 3)$, slope = $-\frac{7}{2}$

$y = -\frac{7}{2}x - 4$

- 13) Cooper, Parker and Dalton went shopping for t-shirts, shorts and shoes for the upcoming basketball season. All t-shirts in the store are the same price, all the shorts are the same price and all the shoes are the same price. Cooper bought 3 shirts, 2 shorts and 1 pair of shoes for \$99. Parker bought 2 shirts, 2 shorts and 2 pair of shoes for \$152. Dalton bought 4 shirts, 1 short and 3 pair of shoes for \$217

Find the price of each item if X is the price of shirts and Y is the price of shorts and Z is the price for a pair of shoes.

shirt: \$7, short: \$9, shoes:\$60