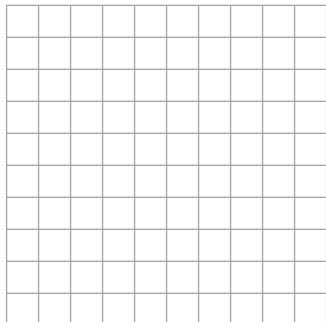


Chapter Test C

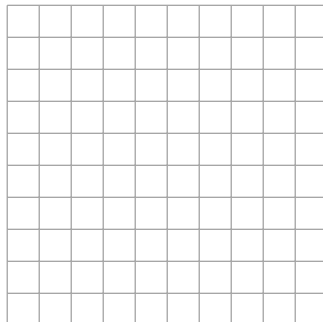
For use after Chapter 7

Graph and check to solve the linear system.

$$\begin{aligned} 1. \quad & -x + 5y = -11 \\ & 3x + 2y = -18 \end{aligned}$$



$$\begin{aligned} 2. \quad & 2.4x + 0.8y = 0.8 \\ & -0.5x + 0.25y = -1 \end{aligned}$$

**Use the substitution method to solve the linear system.**

$$\begin{aligned} 3. \quad & -10x + y = 40 \\ & -5x + 3y = -5 \end{aligned}$$

$$\begin{aligned} 4. \quad & 3x + 5y = -3 \\ & -3x + y = -15 \end{aligned}$$

5. One share of A stock is worth $3\frac{1}{2}$ shares of B stock. If the total value of the stock is \$9000, how much was invested in each company?

Use linear combinations to solve the linear system.

$$\begin{aligned} 6. \quad & 4x + 5y = -2 \\ & 5x = 5 - 10y \end{aligned}$$

$$\begin{aligned} 7. \quad & 3y = 16 - 2x \\ & 3x + 2y = 14 \end{aligned}$$

8. You call two car rental companies to find out their rental prices. Company A charges \$75 plus \$0.25 per mile and Company B charges \$80 plus \$0.30 per mile. If you are traveling 300 miles, which company gives you the better deal?

Solve the system using the method of your choice and tell how many solutions the system has.

$$\begin{aligned} 9. \quad & 7x + 3y = -9 \\ & 3y = x + 15 \end{aligned}$$

$$\begin{aligned} 10. \quad & 6x - 18y = -27 \\ & 6y = 2x + 9 \end{aligned}$$

$$\begin{aligned} 11. \quad & 9x + y = 5 \\ & -4x + 3y = -16 \end{aligned}$$

$$\begin{aligned} 12. \quad & 5y = -6x + 15 \\ & 12x + 10y = -5 \end{aligned}$$

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

Chapter Test C

For use after Chapter 7

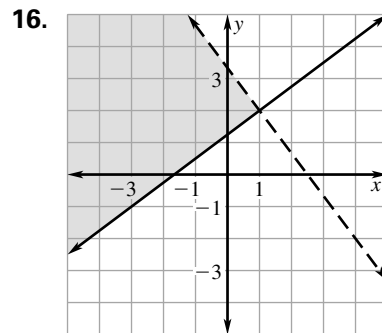
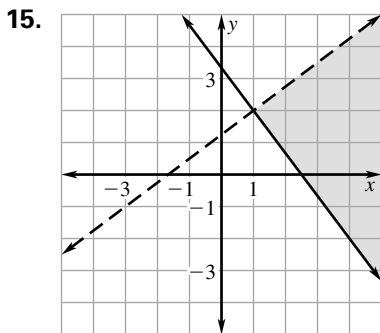
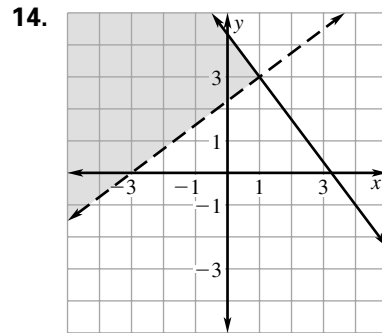
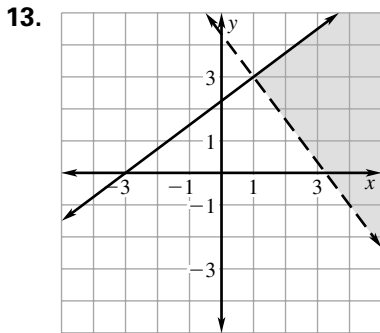
In Questions 13–16, match the system of linear inequalities with its graph.

A. $4x + 3y \leq 13$
 $-3x + 4y > 9$

B. $-3x + 4y < 5$
 $4x + 3y \geq 10$

C. $-3x + 4y \leq 9$
 $4x + 3y > 13$

D. $4x + 3y < 10$
 $-3x + 4y \geq 5$



13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

Graph the system of linear inequalities.

17. $y \leq \frac{1}{2}x + \frac{5}{2}$
 $y > -2x - 3$

18. $y > \frac{3}{4}x + \frac{5}{4}$
 $y \leq -3x + \frac{5}{2}$

