



## 4-2 Additional Practice

### Solving Systems of Equations by Substitution

Use substitution to solve each system of equations.

1. 
$$\begin{cases} y = -x + 4 \\ y = 3x \end{cases}$$

2. 
$$\begin{cases} y = 2x - 10 \\ 2y = x - 8 \end{cases}$$

3. 
$$\begin{cases} x - 2y = 12 \\ y = 3x + 14 \end{cases}$$

4. 
$$\begin{cases} x = 2y - 6 \\ y = 3x - 7 \end{cases}$$

5. 
$$\begin{cases} 6x - 4y = 18 \\ -x - 6y = 7 \end{cases}$$

6. 
$$\begin{cases} 9x - 3y = 9 \\ 3x - y = 3 \end{cases}$$

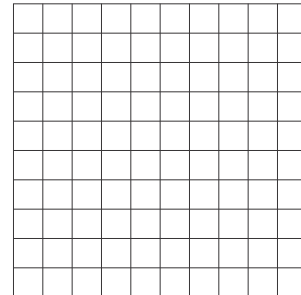
7. 
$$\begin{cases} y = 3x + 8 \\ 2y = 6x + 16 \end{cases}$$

8. 
$$\begin{cases} y = 4x + 5 \\ 12x - 3y = 9 \end{cases}$$

9. 
$$\begin{cases} 7y = -2x + 5 \\ 3x + 10y = 6 \end{cases}$$

10. Solve the system 
$$\begin{cases} x + y = 6 \\ 5x - y = 3 \end{cases}$$

by graphing and by substitution. Compare the methods. Which method is more accurate? Explain.



11. A community theater sold a total of 400 full-price tickets for adults and children. The price was \$8.00 per adult ticket and \$5.00 per children's ticket. If the total revenue was \$2,750, how many adult tickets and how many children's tickets were sold?