6-5 Skills Practice

Applying Systems of Linear Equations

Determine the best method to solve each system of equations. Then solve the system.

2.
$$3x - 5y = 7$$

 $2x + 5y = 13$

$$3. y = 3x - 24 \\ 5x - y = 8$$

$$4. -11x - 10y = 17$$
$$5x - 7y = 50$$

5.
$$4x + y = 24$$

 $5x - y = 12$

6.
$$6x - y = -145$$

 $x = 4 - 2y$

- **7. VEGETABLE STAND** A roadside vegetable stand sells pumpkins for \$5 each and squashes for \$3 each. One day they sold 6 more squash than pumpkins, and their sales totaled \$98. Write and solve a system of equations to find how many pumpkins and squash they sold?
- **8. INCOME** Ramiro earns \$20 per hour during the week and \$30 per hour for overtime on the weekends. One week Ramiro earned a total of \$650. He worked 5 times as many hours during the week as he did on the weekend. Write and solve a system of equations to determine how many hours of overtime Ramiro worked on the weekend.
- **9. BASKETBALL** Anya makes 14 baskets during her game. Some of these baskets were worth 2-points and others were worth 3-points. In total, she scored 30 points. Write and solve a system of equations to find how 2-points baskets she made.