

Name: \_\_\_\_\_

Basic Skills

Date: \_\_\_\_\_

Solving Systems Using Linear Combination

Use the linear combo method to solve the system. Check your answer!

1.  $x + y = 5$   
 $x - y = 7$

2.  $2x - 3y = -16$   
 $x + 3y = 10$

3.  $x + 3y = -3$   
 $x - 4y = 11$

4.  $5x + 2y = 5$   
 $3x + y = 2$

5.  $4x - 5y = -18$   
 $5x + 4y = -2$

6.  $2x + 5y = -22$   
 $4x - 3y = 8$

7.  $9x - 4y = -18$   
 $-3x + 8y = 6$

8.  $4x = -3 + y$   
 $y = -6x - 7$

9.  $4x = 5y + 6$   
 $3y + 2x = -8$

10. A travel agency offers two Boston outings. Plan A includes hotel accommodations for 3 nights and 2 pairs of baseball tickets worth \$645. Plan B includes hotel accommodations for 5 nights and 4 pairs of baseball tickets worth \$1135.

Let  $x$  represent the cost of one night's hotel accommodation and let  $y$  represent the cost of one pair of baseball tickets.

Write a system you could solve to find the cost of one night's hotel accommodation and one pair of baseball tickets (solve for  $x$  and  $y$ ).