

6.2-6.4 Review for Test 6B

Period _____

Solve each system by substitution.

$$\begin{aligned} 1) \quad & -3x - 3y = 3 \\ & 4x + y = -16 \end{aligned}$$

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

$$\begin{aligned} 3) \quad & y = 3x - 1 \\ & y = 8x + 4 \end{aligned}$$

$$\begin{aligned} 4) \quad & -6x + 3y = 24 \\ & y = -4x - 10 \end{aligned}$$

$$\begin{aligned} 5) \quad & 3x - 4y = -17 \\ & -6x + 3y = 24 \end{aligned}$$

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

Solve each system by elimination.

$$\begin{array}{l} 7) \quad -2x - 3y = 4 \\ \quad \quad 2x + 8y = -14 \end{array}$$

$$\begin{array}{l} 8) \quad x - 6y = 23 \\ \quad \quad x - y = 8 \end{array}$$

$$\begin{array}{l} 9) \quad -12x + 8y = -12 \\ \quad \quad -6x - 2y = -6 \end{array}$$

$$\begin{array}{l} 10) \quad -7x - 3y = -21 \\ \quad \quad 8x + 8y = -8 \end{array}$$

$$\begin{array}{l} 11) \quad 4x + 2y = 14 \\ \quad \quad 5x + 3y = 17 \end{array}$$

$$\begin{array}{l} 12) \quad -5x + y = -7 \\ \quad \quad -10x + 7y = 1 \end{array}$$

Write each system in proper form. Then solve using either substitution or elimination. Solve each system by elimination.

13) $-16 + 4x + 7y = 0$
 $3x = -y + 12$

14) $-12 + 8y = x$
 $0 = 2x + 16y - 8$

Write and solve a system of equations.

- 15) Matt and Sumalee each improved their yards by planting hostas and shrubs. They bought their supplies from the same store. Matt spent \$74 on 7 hostas and 2 shrubs. Sumalee spent \$78 on 6 hostas and 9 shrubs. Find the cost of one hosta and the cost of one shrub.
- 16) The school that Daniel goes to is selling tickets to the annual talent show. On the first day of ticket sales the school sold 8 senior citizen tickets and 8 child tickets for a total of \$208. The school took in \$174 on the second day by selling 4 senior citizen tickets and 9 child tickets. Find the price of a senior citizen ticket and the price of a child ticket.