

Name \_\_\_\_\_  
Date \_\_\_\_\_

Advanced Algebra Unit #6 Linear Programming Assignment #3

Review of Solving Systems of Equations

**Solve the following simultaneous equations by graphing:**

1)  $x - y = 2$   
 $3x - y = -6$

2)  $x - y = -1$   
 $x + y = 7$

3)  $x + y = 5$   
 $x - y = -4$

4)  $x + y = -2$   
 $6x - y = 9$

5)  $3x - y = -2$   
 $2x - y = -3$

6)  $5x - y = -1$   
 $2x - y = 5$

**Solve the following systems by using the Elimination Method**

1)  $x + y = 5$   
 $-x + y = 1$

2)  $x + y = 1$   
 $2x + y = 5$

3)  $x + y = 10$   
 $x - y = 6$

4)  $x + y = 14$   
 $x - y = -4$

5)  $x + y = 9$   
 $2x + y = 15$

6)  $x + y = 0$   
 $2x + y = 1$

7)  $2x + 4y = 12$   
 $x + 2y = 2$

8)  $x + y = 2$   
 $2x + y = 7$

9)  $x - 4y = 20$   
 $2x + 5y = 1$

10)  $9x - 5y = -30$   
 $x + 3y = 18$

11)  $x + 3y = -2$   
 $-3x + y = 6$

$$\begin{aligned} 12) \quad & -x + y = -14 \\ & 2x - 3y = 33 \end{aligned}$$

$$\begin{aligned} 13) \quad & 2x + 3y = -7 \\ & -4x - 5y = 13 \end{aligned}$$

$$\begin{aligned} 14) \quad & 2x - 2y = -8 \\ & 7x + 6y = 11 \end{aligned}$$

**Use technology to solve the following simultaneous equations:**

$$\begin{aligned} 1) \quad & 2x + y = 30 \\ & x - 3y = 22 \end{aligned}$$

$$\begin{aligned} 2) \quad & x - y = -19 \\ & 2x + 3y = -13 \end{aligned}$$

$$\begin{aligned} 3) \quad & x + 2y = 39 \\ & 3x - 2y = 45 \end{aligned}$$

$$\begin{aligned} 4) \quad & 2x + 3y = 35 \\ & 3x - y = -30 \end{aligned}$$

$$\begin{aligned} 5) \quad & 5x + 7y = 20 \\ & 3x + 5y = 13 \end{aligned}$$

$$\begin{aligned} 6) \quad & 6x - y = 78 \\ & 7x - 2y = 80 \end{aligned}$$