

Name \_\_\_\_\_

### Solving Systems of Equations - Substitution

1.  $x = 2y + 1$

$$4x - 5y = 13$$

2.  $y = -3x - 6$

$$-5x - 8y = -28$$

3.  $y = 2x - 20$

$$8x + 7y = 80$$

4.  $x = -13y - 2$

$$x = 7y + 18$$

5.  $2y = 4x$

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

6.  $3x = -y$

$$10x + 4y = -6$$

7.  $y = x + 16$

$$10x + 8y = -88$$

8.  $x = 16 - 3y$

$$4x + 12y = 96$$

9.  $x = \frac{1}{2}y - 7$

$$3y = 42$$

10.  $x = -y$

$$-3x - 3y = 0$$

11.  $4x = 8y - 52$

$$5x - y = 34$$

12.  $3y = 12 - 6x$

$$-15x - 4y = -2$$

Name \_\_\_\_\_

### Solving Systems of Equations - Substitution Answers

1.  $x = 2y + 1$   
 $4x - 5y = 13$

(7, 3)

2.  $y = -3x - 6$   
 $-5x - 8y = -28$

(-4, 6)

3.  $y = 2x - 20$   
 $8x + 7y = 80$

(10, 0)

4.  $x = -13y - 2$   
 $x = 7y + 18$

(11, -1)

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

(4, 8)

6.  $3x = -y$   
 $10x + 4y = -6$

(3, -9)

7.  $y = x + 16$   
 $10x + 8y = -88$

(-12, 4)

8.  $x = 16 - 3y$   
 $4x + 12y = 96$

*No Solution*

9.  $x = \frac{1}{2}y - 7$   
 $3y = 42$

(0, 14)

10.  $x = -y$   
 $-3x - 3y = 0$

(6, -6)

11.  $4x = 8y - 52$   
 $5x - y = 34$

(9, 11)

12.  $3y = 12 - 6x$   
 $-15x - 4y = -2$

(-2, 8)