



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

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

## Algebra 1 – Unit 5 – Systems of Equations (Hard)

1.  $4x + 2y = 0$   
 $8x - 6y = -20$

2.  $3x + 5y = 28$   
 $8x + 6y = 60$

3.  $5x + 6y = 14$   
 $7x - 9y = 124$

4.  $8x + 4y = 8$   
 $9x + 5y = 14$

5.  $6x + 7y = 78$   
 $2x - 9y = -42$

6.  $6x + 8y = 50$   
 $5x - 8y = -105$

7.  $7x + 5y = 94$   
 $5x - 3y = 8$

8.  $7x + 6y = 43$   
 $6x + 2y = 40$



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

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

## Algebra 1 – Unit 5 – Systems of Equations (Hard)

9.  $6x + 6y = 0$   
 $8x - 6y = 14$

10.  $4x + 5y = 55$   
 $9x - 6y = 72$

11.  $6x + 2y = -34$   
 $7x - 7y = 7$

12.  $3x + 2y = 0$   
 $9x + 2y = -24$

13.  $7x + 2y = 16$   
 $3x - 6y = 0$

14.  $5x + 8y = 3$   
 $2x - 3y = 26$

15.  $8x + 3y = 35$   
 $9x - 8y = 28$

16.  $3x + 3y = 42$   
 $9x - 4y = 61$



# Algebra 1 – Unit 5 – Systems of Equations (Hard) – Answer Key

1.  $4x + 2y = 0$   
 $8x - 6y = -20$   
 $(-1, 2)$

2.  $3x + 5y = 28$   
 $8x + 6y = 60$   
 $(6, 2)$

3.  $5x + 6y = 14$   
 $7x - 9y = 124$   
 $(10, -6)$

4.  $8x + 4y = 8$   
 $9x + 5y = 14$   
 $(-4, 10)$

5.  $6x + 7y = 78$   
 $2x - 9y = -42$   
 $(6, 6)$

6.  $6x + 8y = 50$   
 $5x - 8y = -105$   
 $(-5, 10)$

7.  $7x + 5y = 94$   
 $5x - 3y = 8$   
 $(7, 9)$

8.  $7x + 6y = 43$   
 $6x + 2y = 40$   
 $(7, -1)$



# Algebra 1 – Unit 5 – Systems of Equations (Hard) – Answer Key

$$\begin{aligned} 9. \quad & 6x + 6y = 0 \\ & 8x - 6y = 14 \\ & (1, -1) \end{aligned}$$

$$\begin{aligned} 10. \quad & 4x + 5y = 55 \\ & 9x - 6y = 72 \\ & (10, 3) \end{aligned}$$

$$\begin{aligned} 11. \quad & 6x + 2y = -34 \\ & 7x - 7y = 7 \\ & (-4, -5) \end{aligned}$$

$$\begin{aligned} 12. \quad & 3x + 2y = 0 \\ & 9x + 2y = -24 \\ & (-4, 6) \end{aligned}$$

$$\begin{aligned} 13. \quad & 7x + 2y = 16 \\ & 3x - 6y = 0 \\ & (2, 1) \end{aligned}$$

$$\begin{aligned} 14. \quad & 5x + 8y = 3 \\ & 2x - 3y = 26 \\ & (7, -4) \end{aligned}$$

$$\begin{aligned} 15. \quad & 8x + 3y = 35 \\ & 9x - 8y = 28 \\ & (4, 1) \end{aligned}$$

$$\begin{aligned} 16. \quad & 3x + 3y = 42 \\ & 9x - 4y = 61 \\ & (9, 5) \end{aligned}$$