



Name: _____

Date: _____

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

$$\begin{aligned}1. \quad & 4x + 2y = 0 \\& 8x - 6y = -20\end{aligned}$$

$$\begin{aligned}2. \quad & 3x + 5y = 28 \\& 8x + 6y = 60\end{aligned}$$

$$\begin{aligned}3. \quad & 5x + 6y = 14 \\& 7x - 9y = 124\end{aligned}$$

$$\begin{aligned}4. \quad & 8x + 4y = 8 \\& 9x + 5y = 14\end{aligned}$$

$$\begin{aligned}5. \quad & 6x + 7y = 78 \\& 2x - 9y = -42\end{aligned}$$

$$\begin{aligned}6. \quad & 6x + 8y = 50 \\& 5x - 8y = -105\end{aligned}$$

$$\begin{aligned}7. \quad & 7x + 5y = 94 \\& 5x - 3y = 8\end{aligned}$$

$$\begin{aligned}8. \quad & 7x + 6y = 43 \\& 6x + 2y = 40\end{aligned}$$



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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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

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