

Unit 3.2 Practice Solving systems using elimination

Period _____

Solve each system by elimination.

1)
$$\begin{aligned} -8x + 3y &= -4 \\ -5x - 3y &= -22 \end{aligned}$$

 $(2, 4)$

2)
$$\begin{aligned} -8x - 4y &= 24 \\ 4x + 4y &= -28 \end{aligned}$$

 $(1, -8)$

3)
$$\begin{aligned} -x - 3y &= 6 \\ -7x - 3y &= 24 \end{aligned}$$

 $(-3, -1)$

4)
$$\begin{aligned} -3x - 5y &= 27 \\ -3x + y &= 27 \end{aligned}$$

 $(-9, 0)$

5)
$$\begin{aligned} 7x - y &= 17 \\ -14x - 4y &= -16 \end{aligned}$$

 $(2, -3)$

6)
$$\begin{aligned} -10x + 2y &= -4 \\ x + 6y &= 19 \end{aligned}$$

 $(1, 3)$

7)
$$\begin{aligned} -3x + 4y &= -21 \\ -5x + 3y &= -24 \end{aligned}$$

 $(3, -3)$

8)
$$\begin{aligned} 21x + 7y &= 0 \\ 27x + 9y &= 0 \end{aligned}$$

Infinite number of solutions

$$\begin{aligned} 9) \quad & -2x + 5y = 10 \\ & 0 = 15 + 2y + 3x \\ & \quad (-5, 0) \end{aligned}$$

$$\begin{aligned} 10) \quad & -10x + 4y + 2 = 0 \\ & 7y = -23 - 2x \\ & \quad (-1, -3) \end{aligned}$$

$$\begin{aligned} 11) \quad & 4y + 4 = 4x \\ & 9x = 9y + 27 \\ & \quad \text{No solution} \end{aligned}$$

$$\begin{aligned} 12) \quad & -5y = 21 + 7x \\ & 0 = 6x + 4y + 20 \\ & \quad (-8, 7) \end{aligned}$$

$$\begin{aligned} 13) \quad & 18x = -6 + 15y \\ & 6y - 5x = 20 \\ & \quad (8, 10) \end{aligned}$$

$$\begin{aligned} 14) \quad & -48 + 24y = 15x \\ & 0 = 7x - 5y + 10 \\ & \quad (0, 2) \end{aligned}$$

$$\begin{aligned} 15) \quad & -4x = 5y + 27 \\ & 0 = -7x - 2y \\ & \quad (2, -7) \end{aligned}$$

$$\begin{aligned} 16) \quad & 0 = -14 - 10y - 7x \\ & 9x + 18 + 18y = 0 \\ & \quad (-2, 0) \end{aligned}$$

$$\begin{aligned} 17) \quad & 0 = -3y - 28 + 4x \\ & -7y = 21 - 3x \\ & \quad (7, 0) \end{aligned}$$

$$\begin{aligned} 18) \quad & -2y = 2 + 6x \\ & 9y = -9 - 10x \\ & \quad (0, -1) \end{aligned}$$