

Practice for Week 6: Systems of Linear Equations

Date _____ Period _____

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Solve each system.

$$\begin{aligned} 1) \quad & -33 = 24y + 15x \\ & 25 + 7x + 8y = 0 \end{aligned}$$

$$\begin{aligned} 2) \quad & -5x = -24 + 9y \\ & -10x = -9y - 21 \end{aligned}$$

$$\begin{aligned} 3) \quad & 0 = 7 + 3x - y \\ & -3x + 9 + 9y = 0 \end{aligned}$$

$$\begin{aligned} 4) \quad & -27 = 9x - 6y \\ & 0 = 15 + 6y - 3x \end{aligned}$$

$$\begin{aligned} 5) \quad & y = 6x + 10 \\ & y = 7x + 11 \end{aligned}$$

$$\begin{aligned} 6) \quad & 0 = y - \frac{25}{8} - \frac{1}{8}x \\ & 3y - 10 = x \end{aligned}$$

$$\begin{aligned} 7) \quad & 0 = 9y + 7x - 25 \\ & 9 - 7x = y \end{aligned}$$

$$\begin{aligned} 8) \quad & -x + 3y = 0 \\ & 1 = -x + 3y \end{aligned}$$

$$\begin{aligned} 9) \quad & 0 = -32 - 16x - 10y \\ & 0 = -36 + 15y + 12x \end{aligned}$$

$$\begin{aligned} 10) \quad & -3x = -23 + 2y \\ & 0 = 4y - 11 + x \end{aligned}$$

$$\begin{aligned} 11) \quad & -2y = -14 + 4x \\ & -4y = -7x + 2 \end{aligned}$$

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

$$\begin{aligned} 13) \quad & -5x + 18y = -23 \\ & 9y = 7x - 16 \end{aligned}$$

$$\begin{aligned} 14) \quad & y = -4x \\ & 5x - 7y = 0 \end{aligned}$$

$$\begin{aligned} 15) \quad & x - y = 6 \\ & -6x - 6y = -12 \end{aligned}$$

$$\begin{aligned} 16) \quad & 7x + 3y = 4 \\ & 3x + y = 4 \end{aligned}$$

$$\begin{aligned} 17) \quad & -6x - 5y = 24 \\ & 3x + y = -3 \end{aligned}$$

$$\begin{aligned} 18) \quad & -2x + 7y = 1 \\ & 6x + y = 19 \end{aligned}$$

$$\begin{aligned} 19) \quad & -6x + 4 = 4y \\ & 0 = 3y + 10x - 14 \end{aligned}$$

$$\begin{aligned} 20) \quad & -81 = 27x - 15y \\ & y = -\frac{1}{2}x - \frac{3}{2} \end{aligned}$$

$$\begin{aligned} 21) \quad & 0 = y - x + 1 \\ & 20x - 20y - 20 = 0 \end{aligned}$$

$$\begin{aligned} 22) \quad & 7x - 6y - 21 = 0 \\ & -1 - \frac{5}{12}y = -\frac{1}{3}x \end{aligned}$$

$$\begin{aligned} 23) \quad & -2x + 5y = 14 \\ & -x - 5y = -8 \end{aligned}$$

$$\begin{aligned} 24) \quad & -4x - 5y = -22 \\ & 6x + 4y = 12 \end{aligned}$$

$$\begin{aligned} 25) \quad & -3x - 5y = -9 \\ & -4x + 2y = 14 \end{aligned}$$

$$\begin{aligned} 26) \quad & -3x + 4y = 13 \\ & 3x - 2y = 1 \end{aligned}$$

Answers to Practice for Week 6: Systems of Linear Equations (ID: 1)

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|----------------------------------|---------------|-----------------|----------------|
| 1) $(-7, 3)$ | 2) $(3, 1)$ | 3) $(-3, -2)$ | 4) $(-7, -6)$ |
| 5) $(-1, 4)$ | 6) $(-1, 3)$ | 7) $(1, 2)$ | 8) No solution |
| 9) $(-7, 8)$ | 10) $(7, 1)$ | 11) $(2, 3)$ | |
| 12) Infinite number of solutions | 13) $(1, -1)$ | 14) $(0, 0)$ | |
| 15) $(4, -2)$ | 16) $(4, -8)$ | 17) $(1, -6)$ | 18) $(3, 1)$ |
| 19) $(2, -2)$ | 20) $(-3, 0)$ | 21) No solution | 22) $(3, 0)$ |
| 23) $(-2, 2)$ | 24) $(-2, 6)$ | 25) $(-2, 3)$ | 26) $(5, 7)$ |