

Solve Systems using elimination and substitution

Date _____ Period _____

Solve each system by elimination.

$$\begin{array}{l} 1) \ 7x - 2y = -3 \\ \quad 5x - 2y = -1 \end{array}$$

$$\begin{array}{l} 2) \ -9x + 7y = -19 \\ \quad 4x - 7y = -11 \end{array}$$

$$\begin{array}{l} 3) \ -2x - 8y = -28 \\ \quad 10x + 16y = -4 \end{array}$$

$$\begin{array}{l} 4) \ -3x - 4y = -24 \\ \quad -12x + 5y = 30 \end{array}$$

$$\begin{array}{l} 5) \ -2x - 9y = -18 \\ \quad 8x + 8y = 16 \end{array}$$

$$\begin{array}{l} 6) \ 10x - 14y = -6 \\ \quad -2x + 7y = -3 \end{array}$$

$$\begin{aligned} 7) \quad & 8x + 8y = -8 \\ & 2x + 2y = -2 \end{aligned}$$

$$\begin{aligned} 8) \quad & 2x - 2y = -4 \\ & -3x + 4y = 5 \end{aligned}$$

Solve each system by substitution.

$$\begin{aligned} 9) \quad & -4x + y = 7 \\ & -3x + 7y = 24 \end{aligned}$$

$$\begin{aligned} 10) \quad & x + 3y = -18 \\ & -3x - y = 22 \end{aligned}$$

$$\begin{aligned} 11) \quad & -5x - 5y = -20 \\ & -x + y = -12 \end{aligned}$$

$$\begin{aligned} 12) \quad & 6x + 2y = 18 \\ & x + 5y = -11 \end{aligned}$$

Answers to Solve Systems using elimination and substitution

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|---------------|---------------|---------------------------------|---------------|
| 1) $(-1, -2)$ | 2) $(6, 5)$ | 3) $(-10, 6)$ | 4) $(0, 6)$ |
| 5) $(0, 2)$ | 6) $(-2, -1)$ | 7) Infinite number of solutions | |
| 8) $(-3, -1)$ | 9) $(-1, 3)$ | 10) $(-6, -4)$ | 11) $(8, -4)$ |
| 12) $(4, -3)$ | | | |