

Elimination Method

Date _____ Period _____

Solve each system by elimination.

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

2)
$$\begin{aligned} 4x - 4y &= -24 \\ -4x + 6y &= 26 \end{aligned}$$

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

4)
$$\begin{aligned} 5x - 5y &= 15 \\ -5x + 3y &= -21 \end{aligned}$$

5)
$$\begin{aligned} 3x - y &= 7 \\ 5x + y &= 25 \end{aligned}$$

6)
$$\begin{aligned} -5x + 3y &= 14 \\ 7x - 3y &= -22 \end{aligned}$$

7)
$$\begin{aligned} x - y &= -9 \\ x + 5y &= -15 \end{aligned}$$

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

9)
$$\begin{aligned} 7x + 5y &= -11 \\ x + 5y &= -23 \end{aligned}$$

10)
$$\begin{aligned} -9x - 5y &= -4 \\ 6x - 5y &= 11 \end{aligned}$$

11)
$$\begin{aligned} -4x + 9y &= 13 \\ -x + 9y &= 10 \end{aligned}$$

12)
$$\begin{aligned} -x - y &= -7 \\ -3x - y &= -23 \end{aligned}$$

13)
$$\begin{aligned} -16x + 9y &= 30 \\ -8x - 3y &= 30 \end{aligned}$$

14)
$$\begin{aligned} -4x - 2y &= 26 \\ -12x + 10y &= -2 \end{aligned}$$

$$\begin{aligned} 15) \quad & -12x + 8y = 24 \\ & 6x - 4y = -12 \end{aligned}$$

$$\begin{aligned} 16) \quad & -10x + 5y = 0 \\ & 5x - 2y = -1 \end{aligned}$$

$$\begin{aligned} 17) \quad & -4x - 5y = 9 \\ & -12x + 8y = 4 \end{aligned}$$

$$\begin{aligned} 18) \quad & x + 9y = 24 \\ & -3x + 5y = 24 \end{aligned}$$

$$\begin{aligned} 19) \quad & 6x + 9y = -15 \\ & 4x + 10y = -14 \end{aligned}$$

$$\begin{aligned} 20) \quad & 3x - 4y = -24 \\ & 10x + 3y = 18 \end{aligned}$$

$$\begin{aligned} 21) \quad & 10x + 5y = 30 \\ & -7x + 2y = 1 \end{aligned}$$

$$\begin{aligned} 22) \quad & -8x + 7y = -8 \\ & -6x - 2y = -6 \end{aligned}$$

$$\begin{aligned} 23) \quad & 5x + 3y = -14 \\ & 2x + 2y = -8 \end{aligned}$$

$$\begin{aligned} 24) \quad & -10x + 5y = 15 \\ & 4x - 3y = -13 \end{aligned}$$

$$\begin{aligned} 25) \quad & -6 + y = -7x \\ & y + 7x - 12 = 0 \end{aligned}$$

$$\begin{aligned} 26) \quad & y - 4x = 14 \\ & 4 - 6x = y \end{aligned}$$

$$\begin{aligned} 27) \quad & 3y + 1 = 5x \\ & -14y = 38 + 10x \end{aligned}$$

$$\begin{aligned} 28) \quad & -13 = -7x - 4y \\ & -9x - 4y = -27 \end{aligned}$$

$$\begin{aligned} 29) \quad & 2 + \frac{2}{5}x = \frac{4}{5}y \\ & -x = -7 + 2y \end{aligned}$$

$$\begin{aligned} 30) \quad & y = -x - 15 \\ & -\frac{10}{3} - \frac{4}{3}x = -2y \end{aligned}$$

Elimination Method

Date _____ Period _____

Solve each system by elimination.

1) $4x - y = -5$
 $-3x + y = 5$

 $(0, 5)$

2) $4x - 4y = -24$
 $-4x + 6y = 26$

 $(-5, 1)$

3) $-2x - y = 5$
 $8x + y = -5$

 $(0, -5)$

4) $5x - 5y = 15$
 $-5x + 3y = -21$

 $(6, 3)$

5) $3x - y = 7$
 $5x + y = 25$

 $(4, 5)$

6) $-5x + 3y = 14$
 $7x - 3y = -22$

 $(-4, -2)$

7) $x - y = -9$
 $x + 5y = -15$

 $(-10, -1)$

8) $-5x - 4y = 5$
 $-5x - 4y = 5$

Infinite number of solutions

9) $7x + 5y = -11$
 $x + 5y = -23$

 $(2, -5)$

10) $-9x - 5y = -4$
 $6x - 5y = 11$

 $(1, -1)$

11) $-4x + 9y = 13$
 $-x + 9y = 10$

 $(-1, 1)$

12) $-x - y = -7$
 $-3x - y = -23$

 $(8, -1)$

13) $-16x + 9y = 30$
 $-8x - 3y = 30$

 $(-3, -2)$

14) $-4x - 2y = 26$
 $-12x + 10y = -2$

 $(-4, -5)$

$$\begin{aligned} 15) \quad & -12x + 8y = 24 \\ & 6x - 4y = -12 \end{aligned}$$

Infinite number of solutions

$$\begin{aligned} 16) \quad & -10x + 5y = 0 \\ & 5x - 2y = -1 \end{aligned}$$

$(-1, -2)$

$$\begin{aligned} 17) \quad & -4x - 5y = 9 \\ & -12x + 8y = 4 \end{aligned}$$

$(-1, -1)$

$$\begin{aligned} 18) \quad & x + 9y = 24 \\ & -3x + 5y = 24 \end{aligned}$$

$(-3, 3)$

$$\begin{aligned} 19) \quad & 6x + 9y = -15 \\ & 4x + 10y = -14 \end{aligned}$$

$(-1, -1)$

$$\begin{aligned} 20) \quad & 3x - 4y = -24 \\ & 10x + 3y = 18 \end{aligned}$$

$(0, 6)$

$$\begin{aligned} 21) \quad & 10x + 5y = 30 \\ & -7x + 2y = 1 \end{aligned}$$

$(1, 4)$

$$\begin{aligned} 22) \quad & -8x + 7y = -8 \\ & -6x - 2y = -6 \end{aligned}$$

$(1, 0)$

$$\begin{aligned} 23) \quad & 5x + 3y = -14 \\ & 2x + 2y = -8 \end{aligned}$$

$(-1, -3)$

$$\begin{aligned} 24) \quad & -10x + 5y = 15 \\ & 4x - 3y = -13 \end{aligned}$$

$(2, 7)$

$$\begin{aligned} 25) \quad & -6 + y = -7x \\ & y + 7x - 12 = 0 \end{aligned}$$

No solution

$$\begin{aligned} 26) \quad & y - 4x = 14 \\ & 4 - 6x = y \end{aligned}$$

$(-1, 10)$

$$\begin{aligned} 27) \quad & 3y + 1 = 5x \\ & -14y = 38 + 10x \end{aligned}$$

$(-1, -2)$

$$\begin{aligned} 28) \quad & -13 = -7x - 4y \\ & -9x - 4y = -27 \end{aligned}$$

$(7, -9)$

$$\begin{aligned} 29) \quad & 2 + \frac{2}{5}x = \frac{4}{5}y \\ & -x = -7 + 2y \end{aligned}$$

$(1, 3)$

$$\begin{aligned} 30) \quad & y = -x - 15 \\ & -\frac{10}{3} - \frac{4}{3}x = -2y \end{aligned}$$

$(-10, -5)$