

#7 Solve Systems of Linear Equations

Solve each system.

1)
$$\begin{aligned} 14x + 4y &= 4 \\ 7x - 2y &= -30 \end{aligned}$$

2)
$$\begin{aligned} -9x + 20y &= 30 \\ 5x - 10y &= -10 \end{aligned}$$

3)
$$\begin{aligned} -15x + 10y &= -20 \\ 5x + 4y &= 14 \end{aligned}$$

4)
$$\begin{aligned} -8x + 10y &= -10 \\ 16x - 8y &= 8 \end{aligned}$$

5)
$$\begin{aligned} -\frac{1}{2} &= y - \frac{1}{2}x \\ -9x - 15 &= -10y \end{aligned}$$

6)
$$\begin{aligned} -2 - 18y &= -14x \\ -27y + 21x &= 3 \end{aligned}$$

7)
$$\begin{aligned} 18 - 9x &= -20y \\ -2x &= -10y - 4 \end{aligned}$$

8)
$$\begin{aligned} 18x - 10y &= 8 \\ -3y - 9x &= -84 \end{aligned}$$

9)
$$\begin{aligned} -8x + 9y &= -7 \\ -3x - 7y &= -13 \end{aligned}$$

10)
$$\begin{aligned} -5x + 3y &= -23 \\ 4x - 2y &= 16 \end{aligned}$$

11)
$$\begin{aligned} -5x - 10y &= 30 \\ -9x + 3y &= -30 \end{aligned}$$

12)
$$\begin{aligned} 10x - 6y &= 4 \\ -3x + 5y &= -14 \end{aligned}$$

13)
$$\begin{aligned} -5x &= 6y \\ -3x &= 4y \end{aligned}$$

14)
$$\begin{aligned} -40 - 4x &= -10y \\ -\frac{9}{7}x &= 4 - y \end{aligned}$$

15)
$$\begin{aligned} 0 &= 90x + 18y \\ -14y - 70x &= 0 \end{aligned}$$

16)
$$\begin{aligned} 4 + 16y &= -10x \\ 21x &= -63 + 21y \end{aligned}$$

Answers to #7 Solve Systems of Linear Equations (ID: 1)

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|----------------------------------|---------------------------------|---------------|---------------|
| 1) $(-2, 8)$ | 2) $(10, 6)$ | 3) $(2, 1)$ | 4) $(0, -1)$ |
| 5) $(-5, -3)$ | 6) Infinite number of solutions | 7) $(2, 0)$ | |
| 8) $(6, 10)$ | 9) $(2, 1)$ | 10) $(1, -6)$ | 11) $(2, -4)$ |
| 12) $(-2, -4)$ | 13) $(0, 0)$ | 14) $(0, 4)$ | |
| 15) Infinite number of solutions | 16) $(-2, 1)$ | | |