

Solving Systems of Equations using Matrices

Solve each system using matrices.

$$\begin{aligned} 1) \quad & -7x - 6y = -20 \\ & -10x - y = -21 \end{aligned}$$

$$\begin{aligned} 2) \quad & -18x + 7y = 17 \\ & 9x + 2y = 19 \end{aligned}$$

$$\begin{aligned} 3) \quad & -4x + 6y = -30 \\ & -x + 2y = -12 \end{aligned}$$

$$\begin{aligned} 4) \quad & -20x + 9y = 1 \\ & -10x + 6y = 14 \end{aligned}$$

$$\begin{aligned} 5) \quad & x - 10y = -3 \\ & 7x - 5y = -21 \end{aligned}$$

$$\begin{aligned} 6) \quad & 4x + 3y = 17 \\ & -8x - y = 1 \end{aligned}$$

$$\begin{aligned} 7) \quad & 2x + 14y = 26 \\ & -6x + 7y = -29 \end{aligned}$$

$$\begin{aligned} 8) \quad & 9x + 5y = -11 \\ & x + 2y = -7 \end{aligned}$$

$$\begin{aligned} 9) \quad & 2x - 6y = 20 \\ & 8x - 9y = 5 \end{aligned}$$

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

$$\begin{aligned} 11) \quad & -4r + 6s + 4t = 28 \\ & 3r - 2s - 4t = -21 \\ & -4r - 2s + 5t = 17 \end{aligned}$$

$$\begin{aligned} 12) \quad & -4x + 6y + 4z = -24 \\ & 2y + 2z = -6 \\ & 3x - 2y + 2z = 8 \end{aligned}$$

$$\begin{aligned} 13) \quad & -3x + 2y + 6z = -15 \\ & -2x - 4y - 6z = -10 \\ & 4x - 3y + 5z = 20 \end{aligned}$$

$$\begin{aligned} 14) \quad & -3a - 5b + 5c = 30 \\ & -2a + 5b + 2c = -26 \\ & a - 5b + 6c = 7 \end{aligned}$$

$$\begin{aligned} 15) \quad & -5x - y - 4z = 11 \\ & -2x - 6y - 4z = -18 \\ & -2x + 6y + z = 30 \end{aligned}$$

$$\begin{aligned} 16) \quad & 6r - 3s - 3t = 30 \\ & 6r + 5s + 2t = -16 \\ & 3r - 5s - t = 19 \end{aligned}$$