

## Linear Systems (A)

Solve each system of equations.

$$\begin{aligned} 1. \quad & -3c - 4u + 4y = -25 \\ & -3c + 3u + 3y = 6 \\ & -4c - 3y = 13 \end{aligned}$$

$$\begin{aligned} 5. \quad & -u - x + 2z = -11 \\ & 3u - 2x + z = -18 \\ & -4u + 5x = 34 \end{aligned}$$

$$\begin{aligned} 2. \quad & 2a - 5u + 3y = -4 \\ & 6a + 5u - y = 8 \\ & -u - 4y = -28 \end{aligned}$$

$$\begin{aligned} 6. \quad & 3a - 5c + 5x = 43 \\ & c - 5x = -24 \\ & 3a + 4x = 19 \end{aligned}$$

$$\begin{aligned} 3. \quad & 6c + 4v - z = -31 \\ & c + v + 6z = 14 \\ & -v - 6z = -20 \end{aligned}$$

$$\begin{aligned} 7. \quad & 4c + u - 3x = 4 \\ & 5c + 6u + 6x = -58 \\ & 6c - 6u + x = 1 \end{aligned}$$

$$\begin{aligned} 4. \quad & -3v - 6y - z = -3 \\ & -5v + 6y + z = 43 \\ & 6y - z = 18 \end{aligned}$$

$$\begin{aligned} 8. \quad & 3c + 5v + 4z = 6 \\ & -2c - 5v - 4z = -5 \\ & -6c + 2v + 4z = 0 \end{aligned}$$

## Linear Systems (A) Answers

Solve each system of equations.

$$\begin{aligned} 1. \quad & -3c - 4u + 4y = -25 \\ & -3c + 3u + 3y = 6 \\ & -4c - 3y = 13 \\ & c = -1, u = 4, y = -3 \end{aligned}$$

$$\begin{aligned} 5. \quad & -u - x + 2z = -11 \\ & 3u - 2x + z = -18 \\ & -4u + 5x = 34 \\ & u = -1, x = 6, z = -3 \end{aligned}$$

$$\begin{aligned} 2. \quad & 2a - 5u + 3y = -4 \\ & 6a + 5u - y = 8 \\ & -u - 4y = -28 \\ & a = -1, u = 4, y = 6 \end{aligned}$$

$$\begin{aligned} 6. \quad & 3a - 5c + 5x = 43 \\ & c - 5x = -24 \\ & 3a + 4x = 19 \\ & a = 1, c = -4, x = 4 \end{aligned}$$

$$\begin{aligned} 3. \quad & 6c + 4v - z = -31 \\ & c + v + 6z = 14 \\ & -v - 6z = -20 \\ & c = -6, v = 2, z = 3 \end{aligned}$$

$$\begin{aligned} 7. \quad & 4c + u - 3x = 4 \\ & 5c + 6u + 6x = -58 \\ & 6c - 6u + x = 1 \\ & c = -2, u = -3, x = -5 \end{aligned}$$

$$\begin{aligned} 4. \quad & -3v - 6y - z = -3 \\ & -5v + 6y + z = 43 \\ & 6y - z = 18 \\ & v = -5, y = 3, z = 0 \end{aligned}$$

$$\begin{aligned} 8. \quad & 3c + 5v + 4z = 6 \\ & -2c - 5v - 4z = -5 \\ & -6c + 2v + 4z = 0 \\ & c = 1, v = -1, z = 2 \end{aligned}$$