

Linear Systems (A)

Solve each system of equations.

$$\begin{aligned} 1. \quad & -3a - 2c + 3u = 6 \\ & 5a + 4c = 4 \\ & 5a = -20 \end{aligned}$$

$$\begin{aligned} 5. \quad & -2a + 2b + 4y = 24 \\ & 4a - 3b = -8 \\ & -5a = 10 \end{aligned}$$

$$\begin{aligned} 2. \quad & 3c + 5u - 3y = 16 \\ & -3c + 4u = 11 \\ & 4c = 12 \end{aligned}$$

$$\begin{aligned} 6. \quad & 3a + 4c - 6y = 57 \\ & -2a + 2c = -4 \\ & -3a = -15 \end{aligned}$$

$$\begin{aligned} 3. \quad & a - c - 4v = -3 \\ & 4a + 2c = -30 \\ & 4a = -24 \end{aligned}$$

$$\begin{aligned} 7. \quad & 5a - 2v - 3z = 35 \\ & -2a + 6v = -8 \\ & 4a = 16 \end{aligned}$$

$$\begin{aligned} 4. \quad & -5v + x + 3z = -20 \\ & 3v - 2x = 15 \\ & 2v = 2 \end{aligned}$$

$$\begin{aligned} 8. \quad & -4b - 5x - z = 20 \\ & -b + 5x = 0 \\ & b = -5 \end{aligned}$$

Linear Systems (A) Answers

Solve each system of equations.

$$\begin{aligned} 1. \quad & -3a - 2c + 3u = 6 \\ & 5a + 4c = 4 \\ & 5a = -20 \\ & a = -4, c = 6, u = 2 \end{aligned}$$

$$\begin{aligned} 5. \quad & -2a + 2b + 4y = 24 \\ & 4a - 3b = -8 \\ & -5a = 10 \\ & a = -2, b = 0, y = 5 \end{aligned}$$

$$\begin{aligned} 2. \quad & 3c + 5u - 3y = 16 \\ & -3c + 4u = 11 \\ & 4c = 12 \\ & c = 3, u = 5, y = 6 \end{aligned}$$

$$\begin{aligned} 6. \quad & 3a + 4c - 6y = 57 \\ & -2a + 2c = -4 \\ & -3a = -15 \\ & a = 5, c = 3, y = -5 \end{aligned}$$

$$\begin{aligned} 3. \quad & a - c - 4v = -3 \\ & 4a + 2c = -30 \\ & 4a = -24 \\ & a = -6, c = -3, v = 0 \end{aligned}$$

$$\begin{aligned} 7. \quad & 5a - 2v - 3z = 35 \\ & -2a + 6v = -8 \\ & 4a = 16 \\ & a = 4, v = 0, z = -5 \end{aligned}$$

$$\begin{aligned} 4. \quad & -5v + x + 3z = -20 \\ & 3v - 2x = 15 \\ & 2v = 2 \\ & v = 1, x = -6, z = -3 \end{aligned}$$

$$\begin{aligned} 8. \quad & -4b - 5x - z = 20 \\ & -b + 5x = 0 \\ & b = -5 \\ & b = -5, x = -1, z = 5 \end{aligned}$$