

Linear Systems (D)

Solve each system of equations.

$$\begin{aligned} 1. \quad & 4u + 6v + 6z = 44 \\ & 6u + 4v + 3z = 31 \\ & 6u + 4v + 4z = 36 \end{aligned}$$

$$\begin{aligned} 5. \quad & 2c + x + 6y = 52 \\ & c + 6x + y = 36 \\ & c + x + 3y = 28 \end{aligned}$$

$$\begin{aligned} 2. \quad & 3a + 4v + 3z = 32 \\ & 6a + 3v + 2z = 38 \\ & 4a + 6v + 4z = 44 \end{aligned}$$

$$\begin{aligned} 6. \quad & 5b + 2y + 3z = 43 \\ & 3b + 6y + 5z = 45 \\ & 6b + 6y + 4z = 60 \end{aligned}$$

$$\begin{aligned} 3. \quad & 2v + 3y + 3z = 37 \\ & 3v + 6y + 3z = 54 \\ & 6v + 6y + 6z = 84 \end{aligned}$$

$$\begin{aligned} 7. \quad & 3a + b + 4c = 22 \\ & a + 5b + 2c = 22 \\ & a + 2b + 2c = 13 \end{aligned}$$

$$\begin{aligned} 4. \quad & 3v + 2x + 5y = 52 \\ & 3v + 5x + 6y = 75 \\ & 4v + 3x + 3y = 53 \end{aligned}$$

$$\begin{aligned} 8. \quad & 2a + u + x = 12 \\ & a + 2u + 3x = 27 \\ & 3a + 4u + 5x = 49 \end{aligned}$$

Linear Systems (D) Answers

Solve each system of equations.

1. $4u + 6v + 6z = 44$
 $6u + 4v + 3z = 31$
 $6u + 4v + 4z = 36$
 $u = 2, v = 1, z = 5$

5. $2c + x + 6y = 52$
 $c + 6x + y = 36$
 $c + x + 3y = 28$
 $c = 6, x = 4, y = 6$

2. $3a + 4v + 3z = 32$
 $6a + 3v + 2z = 38$
 $4a + 6v + 4z = 44$
 $a = 4, v = 2, z = 4$

6. $5b + 2y + 3z = 43$
 $3b + 6y + 5z = 45$
 $6b + 6y + 4z = 60$
 $b = 6, y = 2, z = 3$

3. $2v + 3y + 3z = 37$
 $3v + 6y + 3z = 54$
 $6v + 6y + 6z = 84$
 $v = 5, y = 4, z = 5$

7. $3a + b + 4c = 22$
 $a + 5b + 2c = 22$
 $a + 2b + 2c = 13$
 $a = 5, b = 3, c = 1$

4. $3v + 2x + 5y = 52$
 $3v + 5x + 6y = 75$
 $4v + 3x + 3y = 53$
 $v = 5, x = 6, y = 5$

8. $2a + u + x = 12$
 $a + 2u + 3x = 27$
 $3a + 4u + 5x = 49$
 $a = 1, u = 4, x = 6$