

## Linear Systems (A)

Solve each system of equations.

1.  $2b - 5x = -19$   
 $-b = -3$

5.  $c - 4u = -9$   
 $c = -1$

2.  $-4u + 4x = 12$   
 $-u = -2$

6.  $5u - 2v = 18$   
 $-5u = -30$

3.  $3u - 3y = 30$   
 $5u = 20$

7.  $-5b + 2c = 23$   
 $3b = -9$

4.  $-3c + v = 13$   
 $-c = 4$

8.  $-6v - 4z = -26$   
 $-3v = -9$

## Linear Systems (A) Answers

Solve each system of equations.

$$\begin{aligned} 1. \quad & 2b - 5x = -19 \\ & -b = -3 \\ & b = 3, x = 5 \end{aligned}$$

$$\begin{aligned} 5. \quad & c - 4u = -9 \\ & c = -1 \\ & c = -1, u = 2 \end{aligned}$$

$$\begin{aligned} 2. \quad & -4u + 4x = 12 \\ & -u = -2 \\ & u = 2, x = 5 \end{aligned}$$

$$\begin{aligned} 6. \quad & 5u - 2v = 18 \\ & -5u = -30 \\ & u = 6, v = 6 \end{aligned}$$

$$\begin{aligned} 3. \quad & 3u - 3y = 30 \\ & 5u = 20 \\ & u = 4, y = -6 \end{aligned}$$

$$\begin{aligned} 7. \quad & -5b + 2c = 23 \\ & 3b = -9 \\ & b = -3, c = 4 \end{aligned}$$

$$\begin{aligned} 4. \quad & -3c + v = 13 \\ & -c = 4 \\ & c = -4, v = 1 \end{aligned}$$

$$\begin{aligned} 8. \quad & -6v - 4z = -26 \\ & -3v = -9 \\ & v = 3, z = 2 \end{aligned}$$

## Linear Systems (B)

Solve each system of equations.

1.  $-3a - x = 10$   
 $-6a = 18$

5.  $-5v - 5z = 5$   
 $-3v = -9$

2.  $-4c + 5z = -42$   
 $5c = 15$

6.  $-3c - z = 20$   
 $-c = 6$

3.  $-2b - 3x = 2$   
 $-4b = -8$

7.  $-c - x = -6$   
 $-4c = -8$

4.  $2a - y = 11$   
 $6a = 30$

8.  $-y - z = -2$   
 $-y = 4$

## Linear Systems (B) Answers

Solve each system of equations.

$$\begin{aligned} 1. \quad & -3a - x = 10 \\ & -6a = 18 \\ & a = -3, x = -1 \end{aligned}$$

$$\begin{aligned} 5. \quad & -5v - 5z = 5 \\ & -3v = -9 \\ & v = 3, z = -4 \end{aligned}$$

$$\begin{aligned} 2. \quad & -4c + 5z = -42 \\ & 5c = 15 \\ & c = 3, z = -6 \end{aligned}$$

$$\begin{aligned} 6. \quad & -3c - z = 20 \\ & -c = 6 \\ & c = -6, z = -2 \end{aligned}$$

$$\begin{aligned} 3. \quad & -2b - 3x = 2 \\ & -4b = -8 \\ & b = 2, x = -2 \end{aligned}$$

$$\begin{aligned} 7. \quad & -c - x = -6 \\ & -4c = -8 \\ & c = 2, x = 4 \end{aligned}$$

$$\begin{aligned} 4. \quad & 2a - y = 11 \\ & 6a = 30 \\ & a = 5, y = -1 \end{aligned}$$

$$\begin{aligned} 8. \quad & -y - z = -2 \\ & -y = 4 \\ & y = -4, z = 6 \end{aligned}$$

## Linear Systems (C)

Solve each system of equations.

1.  $5b - 2y = 15$   
 $5b = 25$

5.  $6b + 6z = 18$   
 $b = 2$

2.  $-5u - 6x = 30$   
 $-6u = 36$

6.  $4u - 4x = 12$   
 $u = 5$

3.  $3y - 6z = -3$   
 $4y = -4$

7.  $a + 2c = 6$   
 $-4a = -24$

4.  $c + 3v = 16$   
 $-2c = -2$

8.  $-6y - 2z = -12$   
 $-5y = -5$

## Linear Systems (C) Answers

Solve each system of equations.

1.  $5b - 2y = 15$   
 $5b = 25$   
 $b = 5, y = 5$

5.  $6b + 6z = 18$   
 $b = 2$   
 $b = 2, z = 1$

2.  $-5u - 6x = 30$   
 $-6u = 36$   
 $u = -6, x = 0$

6.  $4u - 4x = 12$   
 $u = 5$   
 $u = 5, x = 2$

3.  $3y - 6z = -3$   
 $4y = -4$   
 $y = -1, z = 0$

7.  $a + 2c = 6$   
 $-4a = -24$   
 $a = 6, c = 0$

4.  $c + 3v = 16$   
 $-2c = -2$   
 $c = 1, v = 5$

8.  $-6y - 2z = -12$   
 $-5y = -5$   
 $y = 1, z = 3$

## Linear Systems (D)

Solve each system of equations.

1.  $-4a + 4y = -24$   
 $a = 3$

5.  $-5c - 4y = -9$   
 $5c = 5$

2.  $6c + 5u = -49$   
 $c = -4$

6.  $-5u + 4x = -17$   
 $-4u = -4$

3.  $6b + 4u = -4$   
 $4b = 0$

7.  $6y - 5z = -31$   
 $4y = -24$

4.  $2u + 6v = 32$   
 $-3u = -3$

8.  $4x - 6y = -32$   
 $-3x = 6$

## Linear Systems (D) Answers

Solve each system of equations.

1.  $-4a + 4y = -24$   
 $a = 3$   
 $a = 3, y = -3$

5.  $-5c - 4y = -9$   
 $5c = 5$   
 $c = 1, y = 1$

2.  $6c + 5u = -49$   
 $c = -4$   
 $c = -4, u = -5$

6.  $-5u + 4x = -17$   
 $-4u = -4$   
 $u = 1, x = -3$

3.  $6b + 4u = -4$   
 $4b = 0$   
 $b = 0, u = -1$

7.  $6y - 5z = -31$   
 $4y = -24$   
 $y = -6, z = -1$

4.  $2u + 6v = 32$   
 $-3u = -3$   
 $u = 1, v = 5$

8.  $4x - 6y = -32$   
 $-3x = 6$   
 $x = -2, y = 4$



## Linear Systems (E)

Solve each system of equations.

1.  $2c - 5z = 21$   
 $-6c = 12$

5.  $-5b + 6v = -21$   
 $3b = -9$

2.  $5a - 2z = -5$   
 $2a = 2$

6.  $-6a + 2z = 22$   
 $a = -5$

3.  $5c - 4x = -21$   
 $5c = -5$

7.  $-5u + 2v = -8$   
 $4u = 16$

4.  $b + 6y = 33$   
 $5b = 15$

8.  $3a + 6y = -45$   
 $-a = 5$

## Linear Systems (E) Answers

Solve each system of equations.

$$\begin{aligned} 1. \quad & 2c - 5z = 21 \\ & -6c = 12 \\ & c = -2, z = -5 \end{aligned}$$

$$\begin{aligned} 5. \quad & -5b + 6v = -21 \\ & 3b = -9 \\ & b = -3, v = -6 \end{aligned}$$

$$\begin{aligned} 2. \quad & 5a - 2z = -5 \\ & 2a = 2 \\ & a = 1, z = 5 \end{aligned}$$

$$\begin{aligned} 6. \quad & -6a + 2z = 22 \\ & a = -5 \\ & a = -5, z = -4 \end{aligned}$$

$$\begin{aligned} 3. \quad & 5c - 4x = -21 \\ & 5c = -5 \\ & c = -1, x = 4 \end{aligned}$$

$$\begin{aligned} 7. \quad & -5u + 2v = -8 \\ & 4u = 16 \\ & u = 4, v = 6 \end{aligned}$$

$$\begin{aligned} 4. \quad & b + 6y = 33 \\ & 5b = 15 \\ & b = 3, y = 5 \end{aligned}$$

$$\begin{aligned} 8. \quad & 3a + 6y = -45 \\ & -a = 5 \\ & a = -5, y = -5 \end{aligned}$$

## Linear Systems (F)

Solve each system of equations.

1.  $5b + 3u = -1$   
 $2b = -4$

5.  $-5a - 2z = -22$   
 $-6a = -12$

2.  $-6b + x = 30$   
 $3b = -12$

6.  $-5a + 6u = -20$   
 $-a = 2$

3.  $c - 2v = 6$   
 $-2c = 12$

7.  $-5b + 6v = -3$   
 $b = -3$

4.  $4b - 6v = -24$   
 $-2b = 12$

8.  $5a - v = 0$   
 $-2a = -2$

## Linear Systems (F) Answers

Solve each system of equations.

1.  $5b + 3u = -1$   
 $2b = -4$   
 $b = -2, u = 3$

5.  $-5a - 2z = -22$   
 $-6a = -12$   
 $a = 2, z = 6$

2.  $-6b + x = 30$   
 $3b = -12$   
 $b = -4, x = 6$

6.  $-5a + 6u = -20$   
 $-a = 2$   
 $a = -2, u = -5$

3.  $c - 2v = 6$   
 $-2c = 12$   
 $c = -6, v = -6$

7.  $-5b + 6v = -3$   
 $b = -3$   
 $b = -3, v = -3$

4.  $4b - 6v = -24$   
 $-2b = 12$   
 $b = -6, v = 0$

8.  $5a - v = 0$   
 $-2a = -2$   
 $a = 1, v = 5$

## Linear Systems (G)

Solve each system of equations.

1.  $-5c - 4x = -25$   
 $-2c = -10$

5.  $a - 5z = -9$   
 $-3a = -3$

2.  $4a - 3b = 38$   
 $4a = 20$

6.  $-6u - 3z = -3$   
 $4u = 8$

3.  $2u - 6x = 6$   
 $5u = 15$

7.  $3c + 5v = -14$   
 $-2c = -4$

4.  $-2x + 5y = 7$   
 $6x = -36$

8.  $2a + 6u = 2$   
 $5a = -25$

## Linear Systems (G) Answers

Solve each system of equations.

$$\begin{aligned} 1. \quad & -5c - 4x = -25 \\ & -2c = -10 \\ & c = 5, x = 0 \end{aligned}$$

$$\begin{aligned} 5. \quad & a - 5z = -9 \\ & -3a = -3 \\ & a = 1, z = 2 \end{aligned}$$

$$\begin{aligned} 2. \quad & 4a - 3b = 38 \\ & 4a = 20 \\ & a = 5, b = -6 \end{aligned}$$

$$\begin{aligned} 6. \quad & -6u - 3z = -3 \\ & 4u = 8 \\ & u = 2, z = -3 \end{aligned}$$

$$\begin{aligned} 3. \quad & 2u - 6x = 6 \\ & 5u = 15 \\ & u = 3, x = 0 \end{aligned}$$

$$\begin{aligned} 7. \quad & 3c + 5v = -14 \\ & -2c = -4 \\ & c = 2, v = -4 \end{aligned}$$

$$\begin{aligned} 4. \quad & -2x + 5y = 7 \\ & 6x = -36 \\ & x = -6, y = -1 \end{aligned}$$

$$\begin{aligned} 8. \quad & 2a + 6u = 2 \\ & 5a = -25 \\ & a = -5, u = 2 \end{aligned}$$

## Linear Systems (H)

Solve each system of equations.

1.  $6a - z = 7$   
 $-6a = -12$

5.  $-4c + 4y = -8$   
 $2c = 0$

2.  $3x - 2z = 1$   
 $4x = 4$

6.  $-5b + 3v = -17$   
 $-5b = -5$

3.  $-4y - 2z = -20$   
 $-6y = -36$

7.  $-3u - 6x = -18$   
 $4u = -8$

4.  $-2a + 6u = -10$   
 $2a = 4$

8.  $4v + z = 20$   
 $2v = 10$

## Linear Systems (H) Answers

Solve each system of equations.

$$\begin{aligned} 1. \quad & 6a - z = 7 \\ & -6a = -12 \\ & a = 2, z = 5 \end{aligned}$$

$$\begin{aligned} 5. \quad & -4c + 4y = -8 \\ & 2c = 0 \\ & c = 0, y = -2 \end{aligned}$$

$$\begin{aligned} 2. \quad & 3x - 2z = 1 \\ & 4x = 4 \\ & x = 1, z = 1 \end{aligned}$$

$$\begin{aligned} 6. \quad & -5b + 3v = -17 \\ & -5b = -5 \\ & b = 1, v = -4 \end{aligned}$$

$$\begin{aligned} 3. \quad & -4y - 2z = -20 \\ & -6y = -36 \\ & y = 6, z = -2 \end{aligned}$$

$$\begin{aligned} 7. \quad & -3u - 6x = -18 \\ & 4u = -8 \\ & u = -2, x = 4 \end{aligned}$$

$$\begin{aligned} 4. \quad & -2a + 6u = -10 \\ & 2a = 4 \\ & a = 2, u = -1 \end{aligned}$$

$$\begin{aligned} 8. \quad & 4v + z = 20 \\ & 2v = 10 \\ & v = 5, z = 0 \end{aligned}$$



## Linear Systems (I)

Solve each system of equations.

1.  $6x - z = 0$   
 $-6x = 0$

5.  $-v + 2y = 18$   
 $-2v = 12$

2.  $5u - 2z = -14$   
 $2u = -4$

6.  $-5a - u = 17$   
 $2a = -6$

3.  $-6b - 2v = 6$   
 $5b = -15$

7.  $3c - 6u = -36$   
 $-3c = 12$

4.  $4u - 6v = -20$   
 $5u = 5$

8.  $-c + 2z = -5$   
 $4c = -12$

## Linear Systems (I) Answers

Solve each system of equations.

1.  $6x - z = 0$   
 $-6x = 0$   
 $x = 0, z = 0$

5.  $-v + 2y = 18$   
 $-2v = 12$   
 $v = -6, y = 6$

2.  $5u - 2z = -14$   
 $2u = -4$   
 $u = -2, z = 2$

6.  $-5a - u = 17$   
 $2a = -6$   
 $a = -3, u = -2$

3.  $-6b - 2v = 6$   
 $5b = -15$   
 $b = -3, v = 6$

7.  $3c - 6u = -36$   
 $-3c = 12$   
 $c = -4, u = 4$

4.  $4u - 6v = -20$   
 $5u = 5$   
 $u = 1, v = 4$

8.  $-c + 2z = -5$   
 $4c = -12$   
 $c = -3, z = -4$

## Linear Systems (J)

Solve each system of equations.

1.  $5b + 4u = -27$   
 $-6b = 18$

5.  $-6u - 4v = -24$   
 $4u = 8$

2.  $-4a - v = 7$   
 $-2a = 4$

6.  $-6c + 5v = -45$   
 $-3c = -15$

3.  $-5a - 4b = -22$   
 $-3a = -18$

7.  $-6a + 2u = 40$   
 $4a = -20$

4.  $-6c - 5x = 5$   
 $-5c = 0$

8.  $-6a - 4z = 48$   
 $6a = -36$

## Linear Systems (J) Answers

Solve each system of equations.

1.  $5b + 4u = -27$   
 $-6b = 18$   
 $b = -3, u = -3$

5.  $-6u - 4v = -24$   
 $4u = 8$   
 $u = 2, v = 3$

2.  $-4a - v = 7$   
 $-2a = 4$   
 $a = -2, v = 1$

6.  $-6c + 5v = -45$   
 $-3c = -15$   
 $c = 5, v = -3$

3.  $-5a - 4b = -22$   
 $-3a = -18$   
 $a = 6, b = -2$

7.  $-6a + 2u = 40$   
 $4a = -20$   
 $a = -5, u = 5$

4.  $-6c - 5x = 5$   
 $-5c = 0$   
 $c = 0, x = -1$

8.  $-6a - 4z = 48$   
 $6a = -36$   
 $a = -6, z = -3$