

## Linear Systems (C)

Solve each system of equations.

1.  $6u + 3y + 2z = 31$   
 $4u + 3y = 15$   
 $3u = 9$

5.  $2a + 6c + 6z = 68$   
 $5a + 5c = 40$   
 $6a = 24$

2.  $a + x + 4z = 12$   
 $2a + 6x = 28$   
 $2a = 10$

6.  $a + 2b + 2x = 8$   
 $3a + 5b = 17$   
 $4a = 16$

3.  $5c + 2y + 6z = 49$   
 $2c + 6y = 18$   
 $5c = 15$

7.  $2c + 3v + 3x = 32$   
 $2c + 4v = 24$   
 $3c = 12$

4.  $2b + 5c + 2z = 28$   
 $3b + 2c = 17$   
 $b = 3$

8.  $4b + 4y + 3z = 23$   
 $5b + 6y = 11$   
 $2b = 2$

## Linear Systems (C) Answers

Solve each system of equations.

1.  $6u + 3y + 2z = 31$   
 $4u + 3y = 15$   
 $3u = 9$   
 $u = 3, y = 1, z = 5$

5.  $2a + 6c + 6z = 68$   
 $5a + 5c = 40$   
 $6a = 24$   
 $a = 4, c = 4, z = 6$

2.  $a + x + 4z = 12$   
 $2a + 6x = 28$   
 $2a = 10$   
 $a = 5, x = 3, z = 1$

6.  $a + 2b + 2x = 8$   
 $3a + 5b = 17$   
 $4a = 16$   
 $a = 4, b = 1, x = 1$

3.  $5c + 2y + 6z = 49$   
 $2c + 6y = 18$   
 $5c = 15$   
 $c = 3, y = 2, z = 5$

7.  $2c + 3v + 3x = 32$   
 $2c + 4v = 24$   
 $3c = 12$   
 $c = 4, v = 4, x = 4$

4.  $2b + 5c + 2z = 28$   
 $3b + 2c = 17$   
 $b = 3$   
 $b = 3, c = 4, z = 1$

8.  $4b + 4y + 3z = 23$   
 $5b + 6y = 11$   
 $2b = 2$   
 $b = 1, y = 1, z = 5$