

## Linear Systems (J)

Solve each system of equations.

1.  $5c + 5u + 5y = 70$   
 $2c + 6u + y = 49$   
 $5c + 2u + 6y = 55$

5.  $3a + c + 3u = 27$   
 $3a + 6c + 4u = 63$   
 $4a + 6c + u = 46$

2.  $4a + b + 4v = 10$   
 $2a + b + 5v = 9$   
 $a + b + 5v = 8$

6.  $2b + 4c + x = 40$   
 $4b + c + 5x = 50$   
 $6b + 5c + x = 70$

3.  $a + 4b + 5v = 30$   
 $5a + 5b + 5v = 50$   
 $3a + b + 2v = 20$

7.  $3a + c + 5u = 42$   
 $a + 2c + u = 14$   
 $4a + c + 3u = 37$

4.  $5u + x + z = 25$   
 $2u + x + 4z = 19$   
 $6u + 4x + 3z = 42$

8.  $3u + y + 3z = 22$   
 $6u + 2y + 3z = 32$   
 $u + 3y + z = 18$

## Linear Systems (J) Answers

Solve each system of equations.

1.  $5c + 5u + 5y = 70$   
 $2c + 6u + y = 49$   
 $5c + 2u + 6y = 55$   
 $c = 5, u = 6, y = 3$

5.  $3a + c + 3u = 27$   
 $3a + 6c + 4u = 63$   
 $4a + 6c + u = 46$   
 $a = 1, c = 6, u = 6$

2.  $4a + b + 4v = 10$   
 $2a + b + 5v = 9$   
 $a + b + 5v = 8$   
 $a = 1, b = 2, v = 1$

6.  $2b + 4c + x = 40$   
 $4b + c + 5x = 50$   
 $6b + 5c + x = 70$   
 $b = 6, c = 6, x = 4$

3.  $a + 4b + 5v = 30$   
 $5a + 5b + 5v = 50$   
 $3a + b + 2v = 20$   
 $a = 4, b = 4, v = 2$

7.  $3a + c + 5u = 42$   
 $a + 2c + u = 14$   
 $4a + c + 3u = 37$   
 $a = 5, c = 2, u = 5$

4.  $5u + x + z = 25$   
 $2u + x + 4z = 19$   
 $6u + 4x + 3z = 42$   
 $u = 4, x = 3, z = 2$

8.  $3u + y + 3z = 22$   
 $6u + 2y + 3z = 32$   
 $u + 3y + z = 18$   
 $u = 2, y = 4, z = 4$