

## Linear Systems (I)

Solve each system of equations.

1.  $2b + 3c + 5y = 43$   
 $5b + 2c + 2y = 44$   
 $4b + c + 4y = 46$

5.  $3c + 4u + 2v = 28$   
 $c + 6u + v = 29$   
 $6c + 2u + 5v = 35$

2.  $3a + 6b + 6z = 36$   
 $6a + b + 4z = 42$   
 $5a + 4b + 2z = 40$

6.  $5u + x + 6y = 51$   
 $6u + x + y = 23$   
 $5u + 6x + 2y = 52$

3.  $6v + 5x + 2y = 34$   
 $v + 3x + 6y = 20$   
 $3v + 5x + 4y = 30$

7.  $6u + 2y + 4z = 42$   
 $5u + 3y + z = 29$   
 $4u + 4y + 3z = 46$

4.  $4a + 4v + 3y = 46$   
 $4a + 3v + 5y = 53$   
 $5a + 4v + y = 36$

8.  $a + 5v + 3z = 19$   
 $a + 5v + 6z = 22$   
 $3a + v + 2z = 8$

## Linear Systems (I) Answers

Solve each system of equations.

1.  $2b + 3c + 5y = 43$   
 $5b + 2c + 2y = 44$   
 $4b + c + 4y = 46$   
 $b = 6, c = 2, y = 5$

5.  $3c + 4u + 2v = 28$   
 $c + 6u + v = 29$   
 $6c + 2u + 5v = 35$   
 $c = 2, u = 4, v = 3$

2.  $3a + 6b + 6z = 36$   
 $6a + b + 4z = 42$   
 $5a + 4b + 2z = 40$   
 $a = 6, b = 2, z = 1$

6.  $5u + x + 6y = 51$   
 $6u + x + y = 23$   
 $5u + 6x + 2y = 52$   
 $u = 2, x = 5, y = 6$

3.  $6v + 5x + 2y = 34$   
 $v + 3x + 6y = 20$   
 $3v + 5x + 4y = 30$   
 $v = 2, x = 4, y = 1$

7.  $6u + 2y + 4z = 42$   
 $5u + 3y + z = 29$   
 $4u + 4y + 3z = 46$   
 $u = 1, y = 6, z = 6$

4.  $4a + 4v + 3y = 46$   
 $4a + 3v + 5y = 53$   
 $5a + 4v + y = 36$   
 $a = 2, v = 5, y = 6$

8.  $a + 5v + 3z = 19$   
 $a + 5v + 6z = 22$   
 $3a + v + 2z = 8$   
 $a = 1, v = 3, z = 1$