## Linear Systems (J)

Solve each system of equations.

1. 
$$4c + 2y + 4z = 28$$
 5.  $2b + v + 3y = 16$ 
 $6c + 2y = 16$ 
 $5b + v = 10$ 
 $3c = 6$ 
 $3b = 3$ 

2. 
$$6b + 6c + 2u = 22$$
  
 $4b + c = 9$   
 $4b = 8$   
6.  $6a + 6b + 2c = 50$   
 $5a + 6b = 36$   
 $a = 6$ 

3. 
$$4v + 5x + 4z = 26$$
  
 $2v + 4x = 12$   
 $v = 2$   
7.  $2a + 5u + 3y = 14$   
 $a + 2u = 5$   
 $2a = 6$ 

4. 
$$4c + 5y + 6z = 36$$
  
 $2c + 2y = 10$   
 $6c = 6$   
8.  $3b + 5u + 3v = 46$   
 $5b + 2u = 15$   
 $2b = 2$ 

## Linear Systems (J) Answers

Solve each system of equations.

1. 4c + 2y + 4z = 285. 2b + v + 3y = 166c + 2y = 165b + v = 103c = 63b = 3c = 2, y = 2, z = 4b = 1, v = 5, y = 3

2. 6b + 6c + 2u = 22 4b + c = 9 4b = 8b = 2, c = 1, u = 2

6. 
$$6a + 6b + 2c = 50$$
  
 $5a + 6b = 36$   
 $a = 6$   
 $a = 6, b = 1, c = 4$ 

3. 4v + 5x + 4z = 26 2v + 4x = 12 v = 2v = 2, x = 2, z = 2 7. 2a + 5u + 3y = 14a + 2u = 52a = 6a = 3, u = 1, y = 1

4. 4c + 5y + 6z = 36 2c + 2y = 10 6c = 6c = 1, y = 4, z = 2

8. 
$$3b + 5u + 3v = 46$$
  
 $5b + 2u = 15$   
 $2b = 2$   
 $b = 1, u = 5, v = 6$