

Linear Systems (E)

Solve each system of equations.

1. $a + 5v - 3y = 6$
 $a + v = -2$
 $-6a = 24$

5. $3c - x - 4z = -1$
 $5c + 6x = 27$
 $-c = -3$

2. $-5u - v + 2y = -14$
 $u - v = 10$
 $5u = 30$

6. $5a + 2y + z = 27$
 $-6a + 6y = -30$
 $-a = -6$

3. $-3c - 4y - 4z = 22$
 $3c + 3y = 3$
 $3c = 18$

7. $-4b - 6c + 6u = 24$
 $-6b - 2c = 36$
 $-2b = 12$

4. $b + 5v - x = -18$
 $-3b + 2v = -5$
 $6b = -6$

8. $4b + 6x - 5z = 17$
 $-2b + x = 8$
 $5b = -5$

Linear Systems (E) Answers

Solve each system of equations.

1. $a + 5v - 3y = 6$

$$a + v = -2$$

$$-6a = 24$$

$$a = -4, v = 2, y = 0$$

5. $3c - x - 4z = -1$

$$5c + 6x = 27$$

$$-c = -3$$

$$c = 3, x = 2, z = 2$$

2. $-5u - v + 2y = -14$

$$u - v = 10$$

$$5u = 30$$

$$u = 6, v = -4, y = 6$$

6. $5a + 2y + z = 27$

$$-6a + 6y = -30$$

$$-a = -6$$

$$a = 6, y = 1, z = -5$$

3. $-3c - 4y - 4z = 22$

$$3c + 3y = 3$$

$$3c = 18$$

$$c = 6, y = -5, z = -5$$

7. $-4b - 6c + 6u = 24$

$$-6b - 2c = 36$$

$$-2b = 12$$

$$b = -6, c = 0, u = 0$$

4. $b + 5v - x = -18$

$$-3b + 2v = -5$$

$$6b = -6$$

$$b = -1, v = -4, x = -3$$

8. $4b + 6x - 5z = 17$

$$-2b + x = 8$$

$$5b = -5$$

$$b = -1, x = 6, z = 3$$