Linear Systems (H)

Solve each system of equations.

1.
$$-4a + 3x + 5z = -29$$

 $-4a + 4x = 4$
 $-5a = -10$
5. $-4u + v - 3x = -12$
 $u + 3v = -17$
 $6u = -12$

2.
$$3a+b+5z=6$$

 $3a-b=-17$
 $a=-6$
6. $-6c+6u-6y=66$
 $-5c+u=21$
 $-5c=20$

3.
$$5b + x + 2y = 1$$

 $6b - 4x = -2$
 $-2b = -2$
7. $c + u + 5v = 22$
 $5c - 3u = -6$
 $c = 0$

4.
$$4a - 5b - 2x = -24$$

 $6a + 4b = 28$
 $5a = 10$
8. $a - 6b - 6v = 5$
 $6a + 4b = -6$
 $5a = -5$

Linear Systems (H) Answers

Solve each system of equations.

1. -4a + 3x + 5z = -29 -4a + 4x = 4 -5a = -10 a = 2, x = 3, z = -65. -4u + v - 3x = -12 u + 3v = -17 6u = -12u = -2, v = -5, x = 5

2. 3a+b+5z=6 3a-b=-17 a=-6a=-6, b=-1, z=5

6.
$$-6c + 6u - 6y = 66$$

 $-5c + u = 21$
 $-5c = 20$
 $c = -4, u = 1, y = -6$

3. 5b + x + 2y = 1 6b - 4x = -2 -2b = -2b = 1, x = 2, y = -3 7. c + u + 5v = 22 5c - 3u = -6 c = 0c = 0, u = 2, v = 4

4. 4a - 5b - 2x = -24 6a + 4b = 28 5a = 10a = 2, b = 4, x = 6

8.
$$a - 6b - 6v = 5$$

 $6a + 4b = -6$
 $5a = -5$
 $a = -1, b = 0, v = -1$