Elimination Worksheet Answer Key

We Are Very Able to Get Rid of Variables

Solve the following systems of equations by using elimination.

1.
$$x + 2y = 4$$
, $2x + 2y = 6$

(2,1)

$$6. \ 3x + 8y = 24, \ 6x + 8y = 12$$

 $\left(-4, \frac{9}{2}\right)$

2.
$$3y + 4z = 12$$
, $9y + 5z = 15$

(0,3)

7.
$$y = -10x + 1, -30x + 3 = 3y$$

Infinitely many solutions.

3.
$$4x + 4y = 8$$
, $2x + y = 16$

(14, -12)

8.
$$4x + 4y = 4$$
, $x + y = 2$

No solution.

4.
$$x + y = 12, x - y = 16$$

(-14, 2)

9.
$$2x + 2y = 8$$
, $4x + 4y = 16$

Infinitely many solutions.

5.
$$y + 4z = 20, y - 4z = 10$$

 $(15, \frac{5}{4})$

10.
$$6x + 12y = 15$$
, $3x + 4y = 6$

 $\left(1,\frac{3}{4}\right)$

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