Answer Key · Lesson 6.3: Solving Systems by Elimination

School Launch · Algebra I · Unit 6 · Worksheet A · for the parent

Key

1. $(-1, -2)$

Solve by elimination: $x + y = -3$ and $2x - 5y = 8$.

2. $(-7, -4)$

Solve by elimination: $x + y = -11$ and $5x + 2y = -43$.

3. $(-5, 7)$

Solve by elimination: $x + y = 2$ and $-x + 5y = 40$.

4. $(5, 7)$

1. Multiply eq. 1 by -5 and eq. 2 by 3, then add: $2x = 10$
2. So $x = 5$; substitute into eq. 1 to get $y = 7$.

Solve by elimination: $-x - 3y = -26$ and $-x - 5y = -40$.

5. $(3, -6)$

1. Multiply eq. 1 by 3 and eq. 2 by 6, then add: $6x = 18$
2. So $x = 3$; substitute into eq. 1 to get $y = -6$.

Solve by elimination: $-4x - 6y = 24$ and $3x + 3y = -9$.

6. $(-2, -6)$

1. Multiply eq. 1 by 3 and eq. 2 by -4, then add: $-22x = 44$
2. So $x = -2$; substitute into eq. 1 to get $y = -6$.

Solve by elimination: $-2x + 4y = -20$ and $4x + 3y = -26$.

7. $(7, 5)$

1. Multiply eq. 1 by -6 and eq. 2 by 5, then add: $8x = 56$
2. So $x = 7$; substitute into eq. 1 to get $y = 5$.

Solve by elimination: $2x - 5y = -11$ and $4x - 6y = -2$.

8. $(2, 2)$

1. Multiply eq. 1 by -1 and eq. 2 by -4, then add: $22x = 44$
2. So $x = 2$; substitute into eq. 1 to get $y = 2$.

Solve by elimination: $-2x + 4y = 4$ and $-5x - y = -12$.

9. $(3, -2)$

1. Multiply eq. 1 by 5 and eq. 2 by -6, then add: $-10x = -30$
2. So $x = 3$; substitute into eq. 1 to get $y = -2$.

Solve by elimination: $4x + 6y = 0$ and $5x + 5y = 5$.

10. $(-7, 3)$

1. Multiply eq. 1 by 4 and eq. 2 by -1, then add: $11x = -77$
2. So $x = -7$; substitute into eq. 1 to get $y = 3$.

Solve by elimination: $4x + y = -25$ and $5x + 4y = -23$.