

Solving Linear Systems by Elimination

Show all your work on your own paper.

1. Solve each system by elimination. Check your solutions using “left-side / right-side”.

a) $x - y = 3$
 $x + y = 7$

b) $4x - 3y = -10$
 $2x + 3y = 22$

2. Solve each system by elimination. Check your final answers with the answer key.

a) $-5x + 6y = -7$
 $-5x + 2y = -19$

b) $8x - 3y = -10$
 $2x - 5y = 6$

c) $-3 = 2x - 3y$
 $2x + y = -15$

d) $4x + 3y = 15$
 $8x - 9y = 15$

3. For additional practice, solve the next three linear systems using either graphing or elimination (or both). Check your final answers with the answer key.

a) $4x - 3y = 5$
 $8x - 6y = 10$

b) $3x + 2y = 16$
 $2x + 3y = 14$

c) $3x + 2y = 5$
 $9x + 6y = 7$

Solving Linear Systems by Elimination — Final Answers

Final answers only.

1. a) $(5, 2)$

b) $(2, 6)$

2. a) $(5, 3)$

b) $(-2, -2)$

c) $(-6, -3)$

d) $(3, 1)$

3. a) infinitely many
solutions

b) $(4, 2)$

c) no solution