

Algebra Chapter 7 Practice Quiz

Work together. There are very few questions, so please do your best with your partners to get each problem solved. Please ask questions any time you get stuck - no reason to be embarrassed!

Find the solution to the system by graphing. Use a straight edge to draw straight lines.

1. $x + y = 1$
 $3x - y = -5$

2. $x - y = 1$
 $x + y = 3$

Use substitution to solve the linear system.

3. $x + 4y = -1$
 $2x - y = 7$

4. $3x - y = 15$
 $x + 2y = -2$

5. $x - 4y = 6$
 $2x + y = -4$

Solve by linear combinations.

6. $3x - 4y = 21$
 $4x + 2y = 6$

Solve by linear combinations.

$$\begin{aligned} 7. \quad & 4x + 3y = -2 \\ & 3x + 2y = -3 \end{aligned}$$

$$\begin{aligned} 8. \quad & 3x + 2y = -5 \\ & 4x - 3y = 16 \end{aligned}$$

Solve the linear system by any method.

$$\begin{aligned} 9. \quad & 3x - 2y = 3 \\ & 6x + 2y = 3 \end{aligned}$$

$$\begin{aligned} 10. \quad & 5x - 2y = 3 \\ & -x + 6y = -2 \end{aligned}$$

11. Determine if the system has no solutions, one solution, or many solutions.

$$\begin{aligned} & 3x - y = -13 \\ & 3x - y = -13 \end{aligned}$$

12. Find the solution of the system, if it exists.

$$\begin{aligned} & 7x - y = 8 \\ & -7x + y = 4 \end{aligned}$$