

System of Equations Quiz

Use substitution to **solve** each system of equations. **SHOW YOUR WORK!!**
Be sure to check your solutions. (4 points each)

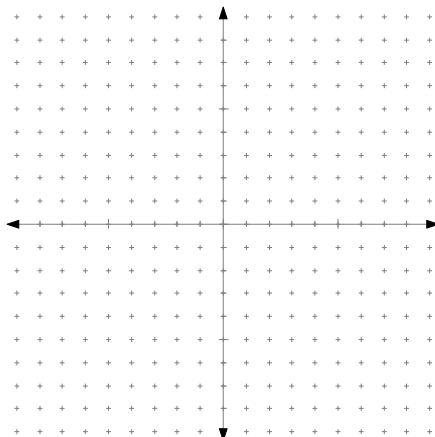
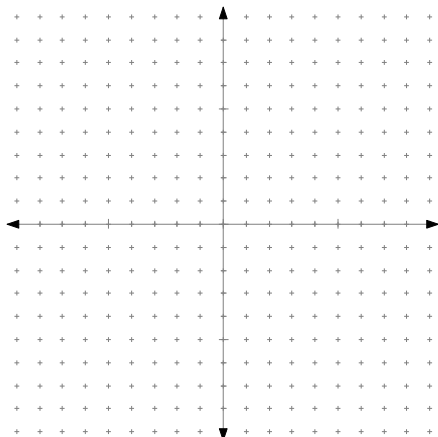
1. $x + 2y = 2$
 $2x + 3y = -1$

2. $x - 10y = 2$
 $x = 6y + 6$

Graph and **classify** each system. Then find the **solution** from the graph. (4 points each)

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

4. $y = -2x + 7$
 $x + y = 5$



System of Equations Quiz

Use elimination to **solve** each system of equations. **SHOW YOUR WORK!!**
Be sure to check your solutions. (4 points each)

5. $3x - 4y = 12$
 $8y - 6x = -24$

6. $7x - 4y = -9$
 $3x + 2y = -15$

Use graphing, substitution, or elimination to solve each system of equations.
SHOW YOUR WORK!! Be sure to check your answers. (4 points each)

7. $2x + 11y = 18$
 $5x + 3y = -4$

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

9. $9x + 3y = -3$
 $y - x = 11$

System of Equations Quiz

Write true or false for each of the following statements. If you decide that it is false, change the underlined word(s) to make the statement true. (2 points each)

_____ 10. A system of equations is a collection of equations in the same variable.

_____ 11. If a system has exactly one solution, it is classified as independent.

_____ 12. If a system does not have a solution, it is classified as dependent.

_____ 13. If a system is inconsistent, then the lines are parallel.

_____ 14. You can graph a system of equations in two variables to find whether a solution for the system exists.

Bonus: Must show ALL work to receive credit. (2 points)

Solve the following system.

$$\begin{cases} x + 3y - z = 8 \\ 2x - y + 2z = -9 \\ 3y = 9 \end{cases}$$