

6.1-6.3 Quiz Review with some 6.4 for fun

Solve each system by graphing. Tell whether the system has *one solution*, *infinitely many solutions*, or *no solution*.

1. $y = 2x + 5$

$y - 4x = -2$

2. $y - 2x = 1$

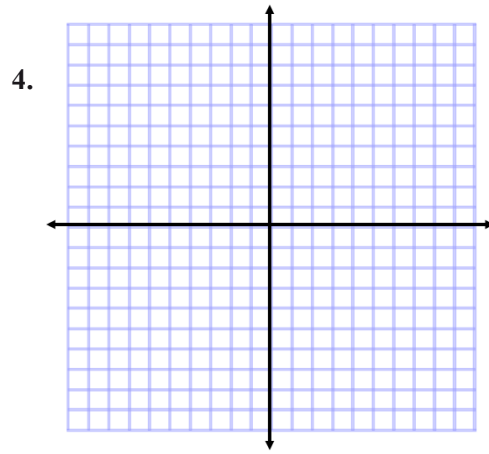
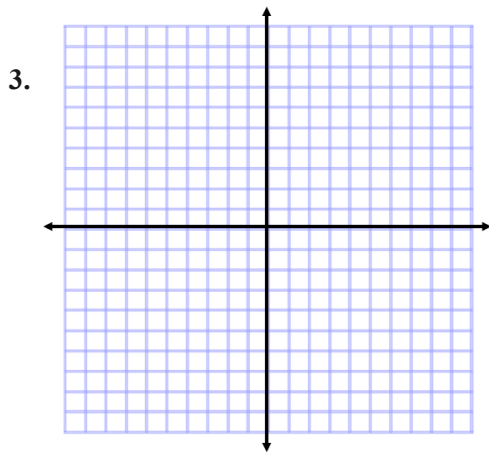
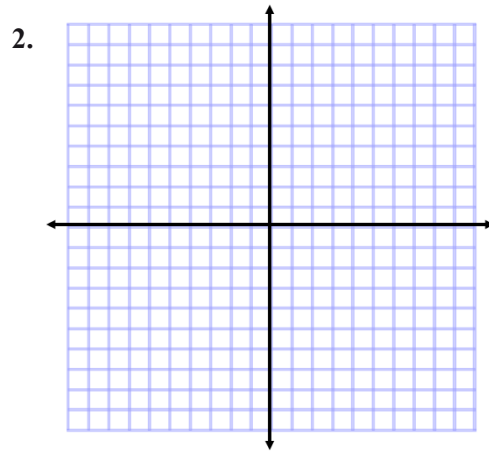
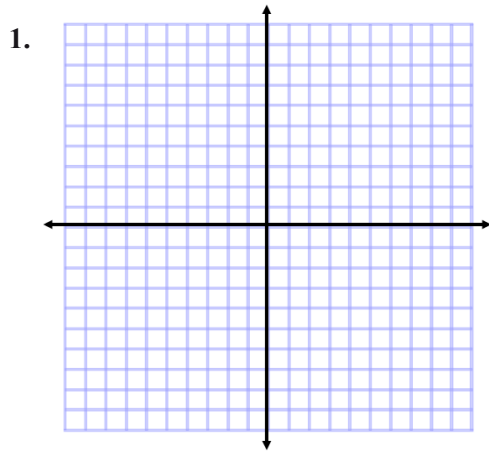
$y = 2x + 6$

3. $y + \frac{x}{2} = 8$

$2y = -x + 16$

4. $2x - 3y = 3$

$x + 4y = -2$



Solve each system using substitution. **SHOW ALL WORK!**

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

6. $y = 3x + 5$
 $y = x + 3$

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

Solve each system using elimination. SHOW ALL WORK!

8. $3x + 4y = 31$
 $2x - 4y = -6$

9. $3x + 5y = 54$
 $6x + 4y = 72$

10. $-14x + 9y = 46$
 $14x - 9y = 102$

11. John paid \$34 for two algebra and three geometry books. He paid \$36 for three algebra and two geometry books. What is the cost of each book?

Write a system of equations

Solve the system, then be sure to actually answer the question that was asked.

12. **Reasoning** If a system of linear equations has no solution, what does that tell you about the slopes and y -intercepts of the graphs of the equations?

13. Thoroughly explain each type of system (consistent, independent, inconsistent, or dependent). Be sure to include the slopes of the lines, a drawing of each so you show what the graphs look like, and the number of solutions.

