Math 8 Name_____

Solving Systems of Equations by Graphing

Score_____Per____

1. What is a system of equations? _____

_____

2. What is a solution to a system of equations? _____

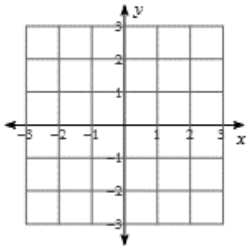
_____

3. What does it mean when we say a system of equations has **one solution**? _____

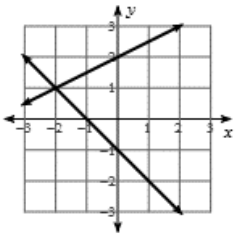
_____

_____

4. Draw an example to show what a system of equations with **one solution** looks like on a graph:



5. Does the following system of equations have one, no, or infinite solutions? _____



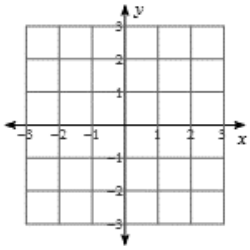
6. What is the solution? (____, ____)

7. What does it mean when we say a system of equations has **no solution**? _____

_____

_____

8. Draw an example to show what a system of equations with **no solution** looks like on a graph:

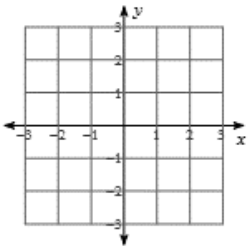


9. What does it mean when we say a system of equations has **infinite solutions**? _____

_____

_____

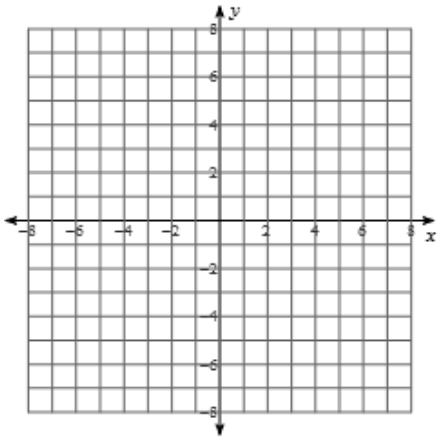
10. Draw an example to show what a system of equations with **infinite solutions** looks like on a graph:



Find the solution to the system of equations by graphing.

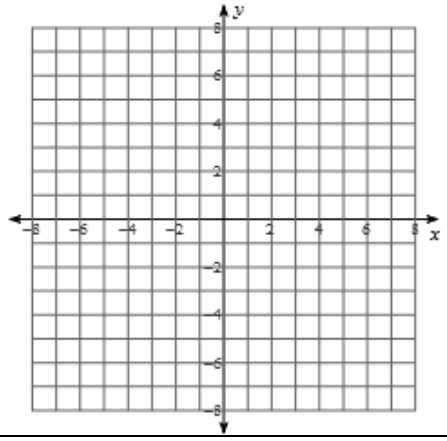
11. $y = -x + 1$

$y = \frac{1}{3}x - 3$ Answer: _____



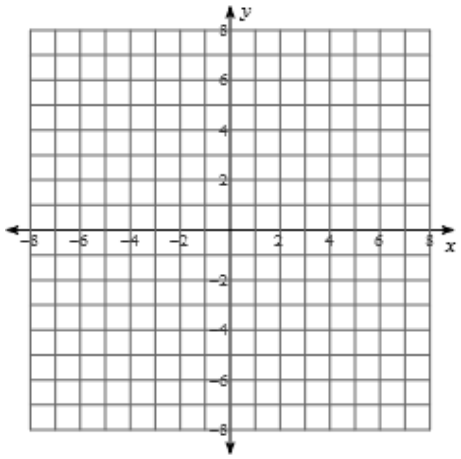
12. $y = -\frac{1}{4}x - 2$

$y = \frac{1}{4}x$ Answer: _____



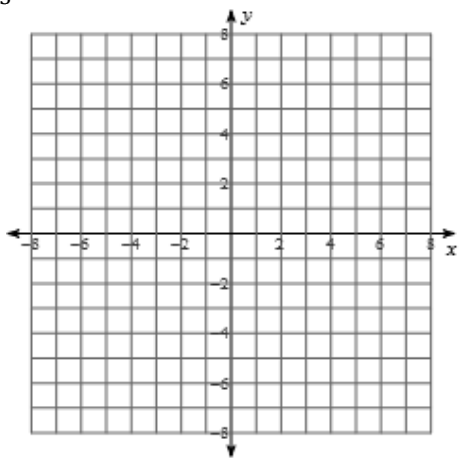
13. $y = 3x - 4$

$x = 2$ Answer: _____



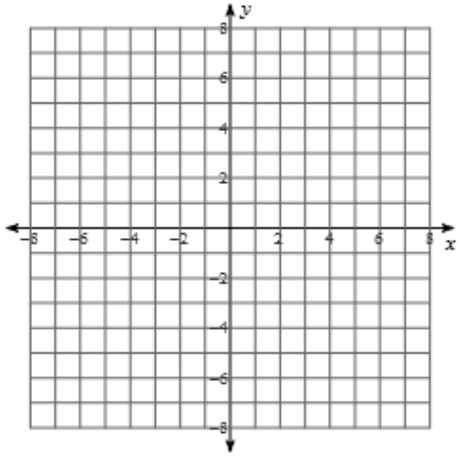
14. $y = \frac{6}{5}x$

$y = \frac{6}{5}x$ Answer: _____



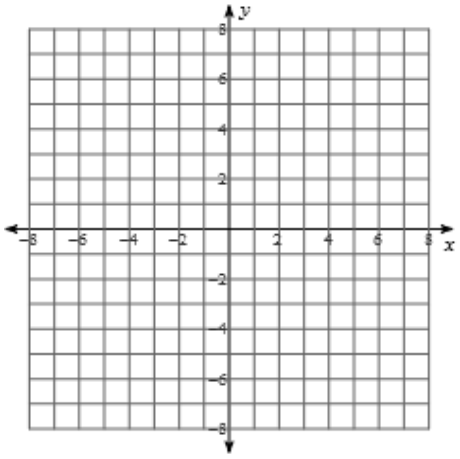
15. $y = -\frac{1}{2}x - 2$

$y = 3x - 2$ Answer: _____



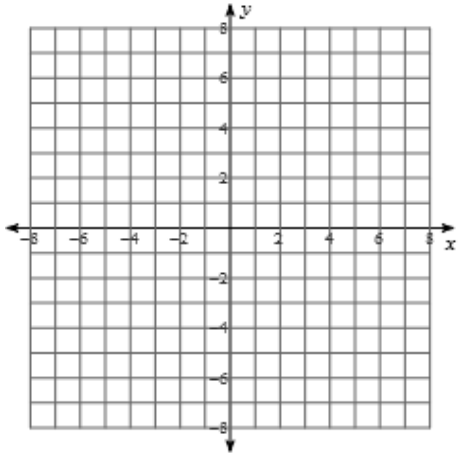
16. $y = \frac{2}{3}x$

$y = \frac{2}{3}x + 2$ Answer: _____



17. $y = 3x - 3$

$y = \frac{6}{2}x - 3$ Answer: _____



18. $y = 2x + 1$

$y = 3x - 1$ Answer: _____