

4.1 Solving Systems of Linear Equations by Graphing **CYU**

Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake

H Use when you could do it alone with a little help from teacher or peer

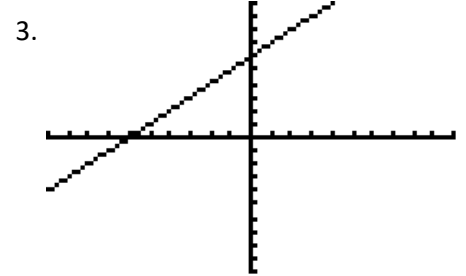
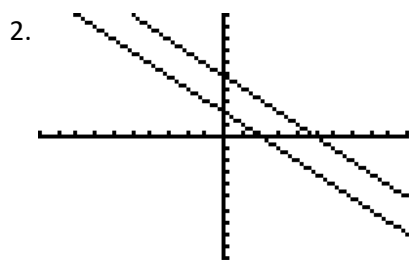
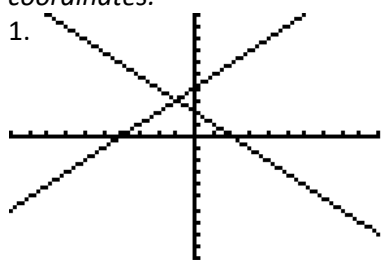
G Use when you completed the problem in a group

X Use when a question was attempted but wrong (get help)

N Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Reading Graphs of systems	2	1, 3	
Checking solutions of systems	4 - 7		
Solving a linear system by graphing	10	8, 9	11, 12, 13
Without graphing state number of solutions	15	14	16
Parallel, Perpendicular, Coinciding, or Intersecting	15	14	16

Each rectangular coordinate system shows the graph of the equations in a system of equations. Use each graph to determine the number of solutions for each associated system. If the system has only one solution, give its coordinates.



Determine whether each ordered pair is a solution of the system of linear equations.

4. $x + y = 8$
 $3x + 2y = 21$
 a) (2, 4)

b) (5, 3)

5. $3x - y = 5$
 $x + 2y = 11$
 a) (3, 4)

b) (0, -5)

6. $2y = 4x + 6$
 $2x - y = -3$
 a) (-3, -3)

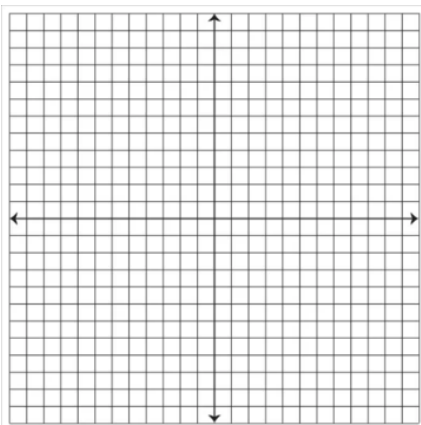
b) (0, 3)

7. $-2 = x - 7y$
 $6x - y = 13$
 a) (-2, 0)

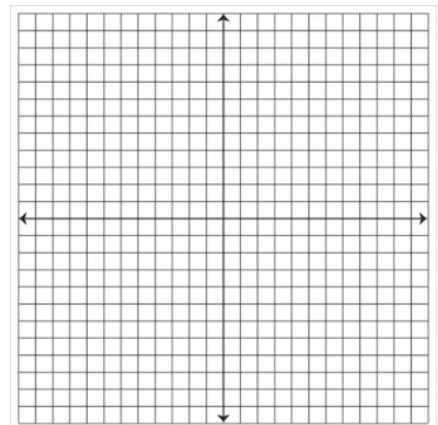
b) $(\frac{1}{2}, \frac{5}{14})$

Solve each system of linear equations by graphing. You can always check using your calculator.

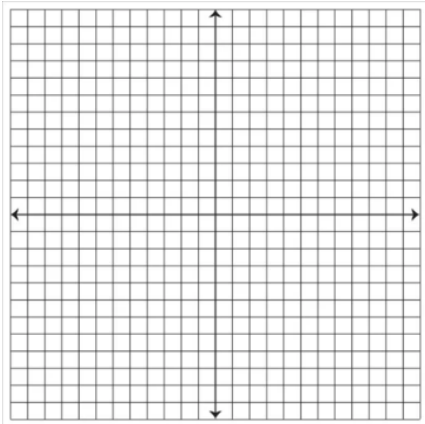
8. $x + y = 4$
 $x - y = 2$



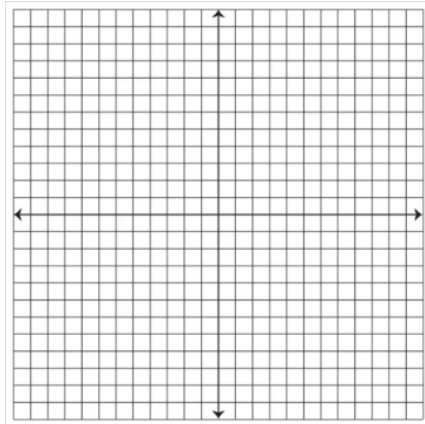
9. $y = 2x$
 $3x - y = -2$



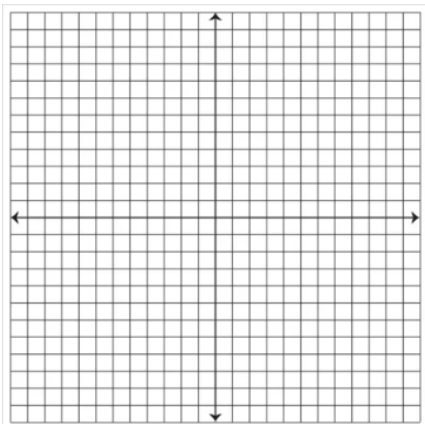
10. $y = x + 1$
 $y = 2x - 1$



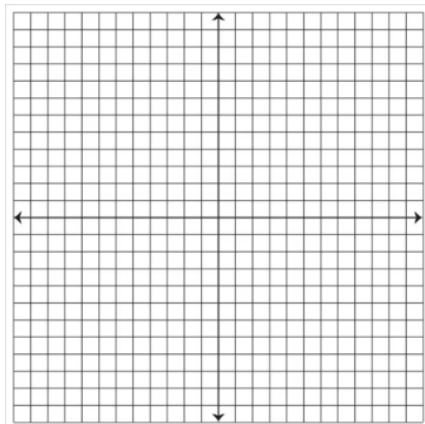
11. $y - 3x = -2$
 $6x - 2y = 4$



12. $\frac{1}{2}y = -2 + 3x$
 $6x - y = 4$



13. $3x - y = 6$
 $\frac{1}{3}y = -2 + x$



Without graphing, decide:

- a) Are the graphs of the equations identical (coinciding) lines, parallel lines, or lines intersecting at a single point?
 b) How many solutions does the system have?

14. $4x + y = 24$
 $x + 2y = 2$

15. $2x + y = 0$
 $2y = 6 - 4x$

16. $6x - y = 4$
 $\frac{1}{2}y = -2 + 3x$

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

