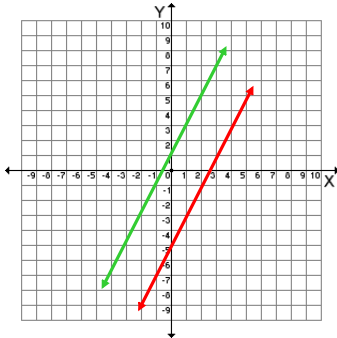
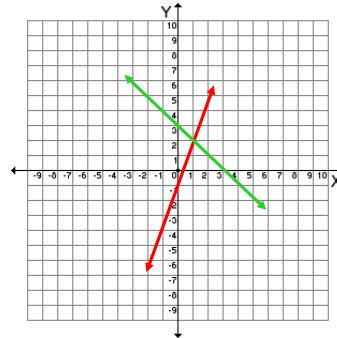


8.5 Graphing System of Linear Equations

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



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



What do you notice about the slopes?

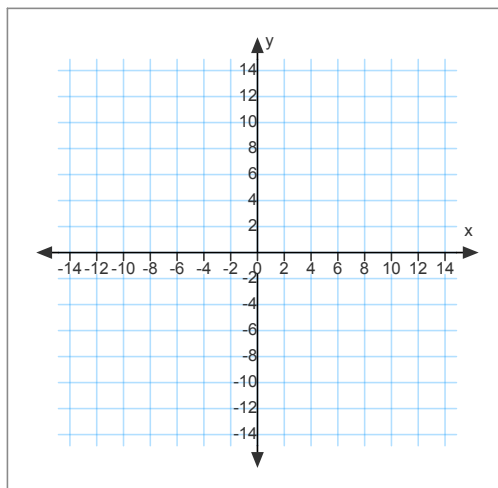
What do you notice about the graphs?

Examples

Will the systems have a point of intersection? Explain. If they do find the point of intersection by substitution and graphing.

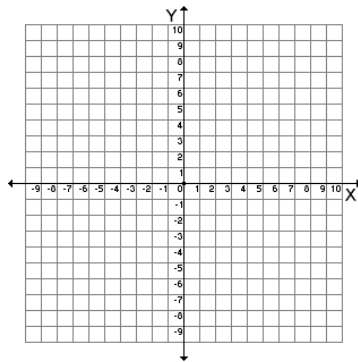
1. $y = 3x + 4$
 $y = 5x - 2$

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

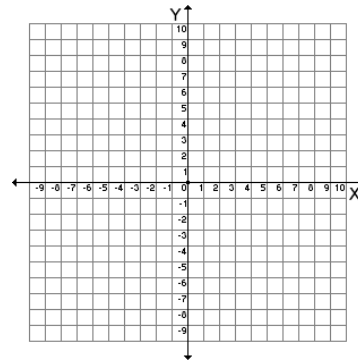


Graph each system of equations and find the solution.

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



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



Rewrite each equations into the slope-intercept form. Then tell whether each system of equations has a solution or no solution.

5. $6x + 2y = 1$
 $9x - 3y = 2$

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