

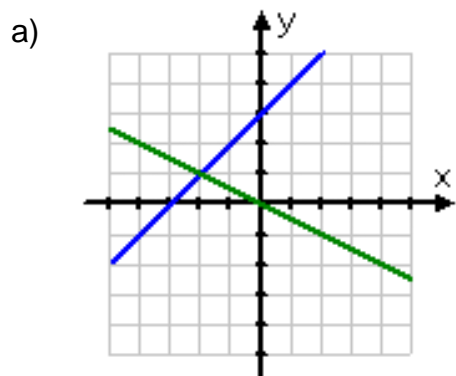
1. Given the linear system $4x + y = 14$ verify $(4, -2)$ is the solution.
 $-2x + 4y = -16$

$4x + y = 14$	$-2x + 4y = -16$	The point $(4, -2)$ satisfies both equations, therefore it is a solution to the linear system.
$4(4) + (-2) = 14$	$-2(4) + 4(-2) = -16$	
$16 - 2 = 14$	$-8 - 8 = -16$	
$14 = 14$	$-16 = -16$	

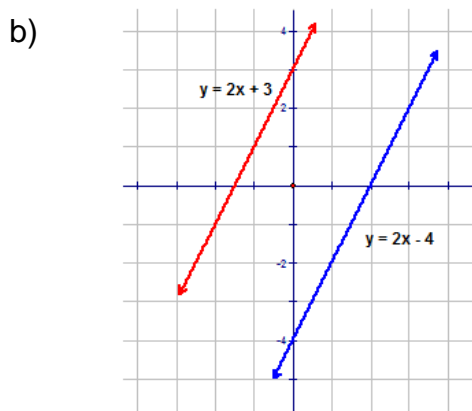
2. Which linear system models the situation: "In a board game, Judy scored 3 points more than twice the number of points as Ann scored. There was a total of 39 points scored."

- a) $j + 3 = 2a$
 $j + a = 39$ **b) $j = 3 + 2a$**
 $j + a = 39$ c) $j - 3 = 2a$
 $j + 2a = 39$ d) $a = 3 + 2j$
 $j + a = 39$

3. What is the solution for the system of equations represented in each graph?



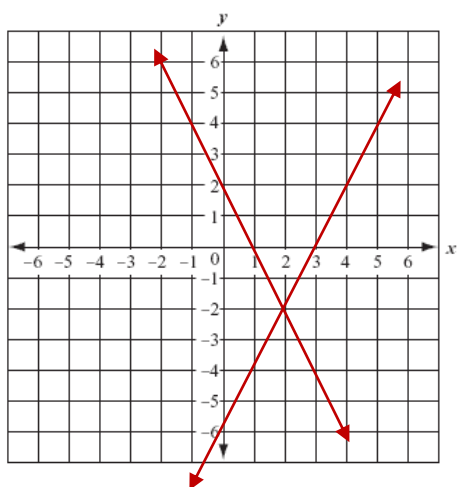
Solution: $(-2, 1)$



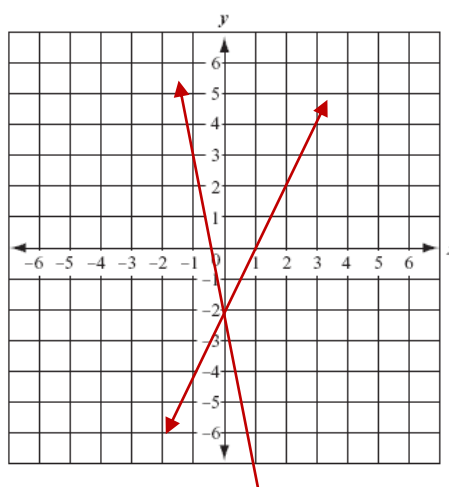
No Solution

4. Solve each linear system by graphing.

- a) $y = -2x + 2$ **$(2, -2)$**
 $y + 6 = 2x$



- b) $-5x - y - 2 = 0$ **$(0, -2)$**
 $2y + 4 = 4x$



- 5(i). Determine the number of solutions for the linear system $2x - 5y = 1$
 $-6x + 15y = -3$

- a) no solution b) one solution c) two solutions **d) infinite solutions**

5(ii) Justify your answer. **Equations are related by multiplication. First equation is multiplied by 3 to equal the second. Or both equations equal**

$y = \frac{2}{5}x - \frac{1}{5}$ **when written in slope-intercept form. They are the same line!**