

Solving Systems by Graphing

Name: _____ Date: _____

Key

I. Determine if (2, 1) is a solution to the following systems:

1) $x - y = 1$
 $3x + y = -5$

$2 - 1 = 1$
 $1 = 1$ ✓
 $3(2) + 1 = -5$
 $6 + 1 = -5$
 $7 = -5$ ✗
No

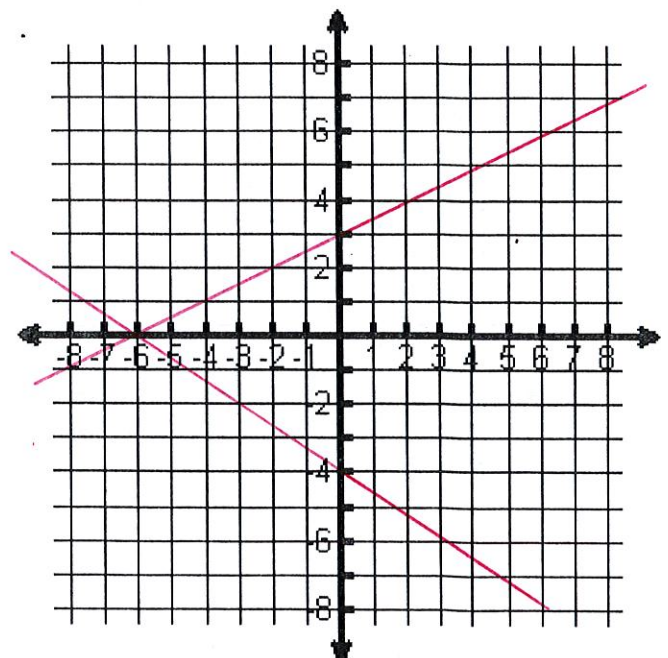
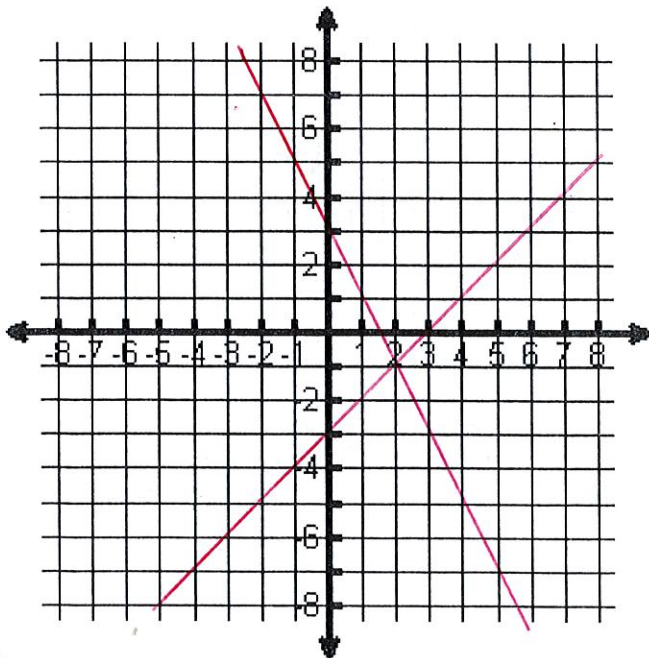
2) $-4x + 3y = -5$
 $-x - y = -3$

$-4(2) + 3(1) = -5$
 $-8 + 3 = -5$
 $-5 = -5$ ✓
 $-(2) - 1 = -3$
 $-2 - 1 = -3$
 $-3 = -3$ ✓
Yes

II. For 3 – 6, solve each system graphically. Write your solution in the blank provided. Check each solution.

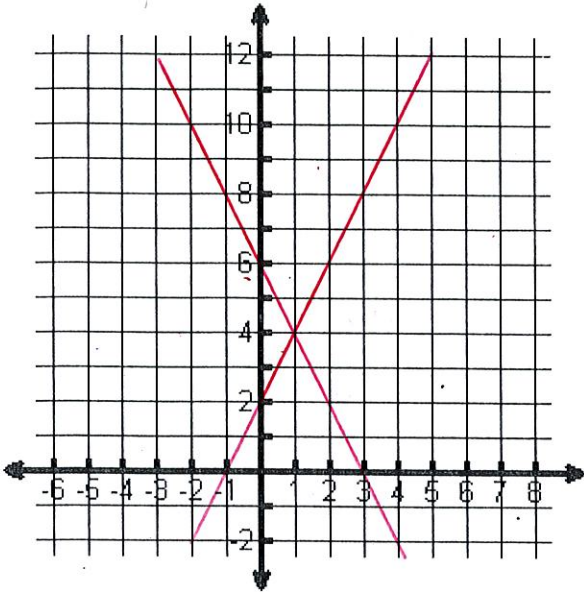
(2, -1)
3) $y = -2x + 3$
 $y = x - 3$

(-6, 0)
4) $y = \frac{1}{2}x + 3$
 $y = -\frac{2}{3}x - 4$

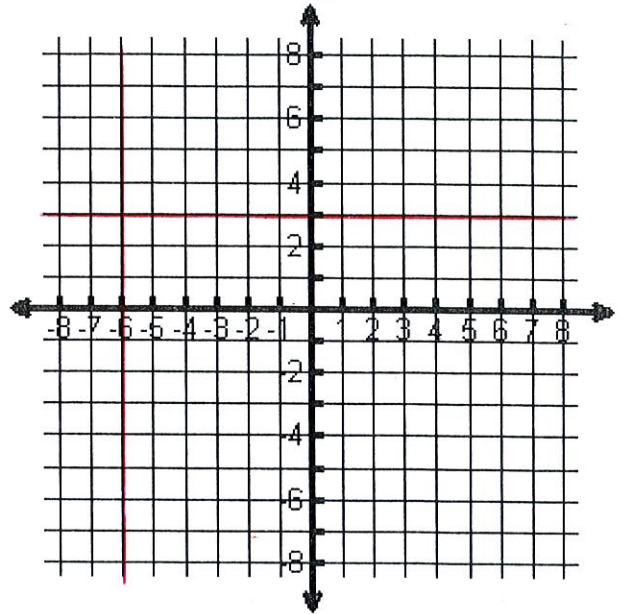


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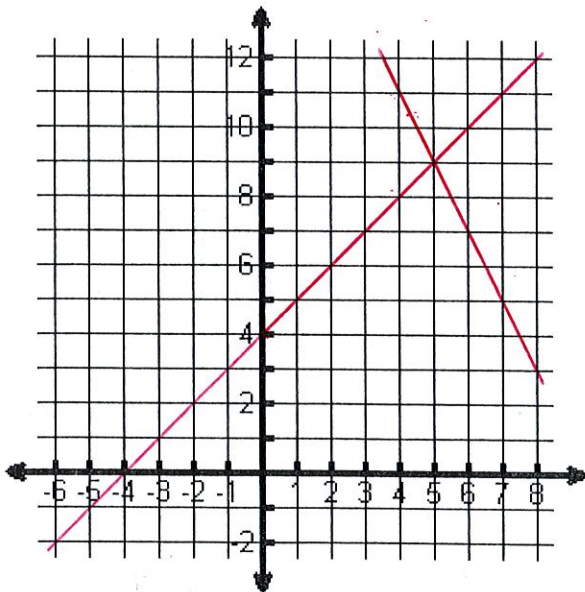
5) $2x + y = 6$ $y = -2x + 6$
 $-4x + 2y = 4$ $y = 2x + 2$



6) $y = 3$
 $x = -6$



7) $y = x + 4$
 $2x + y = 19$ $y = -2x + 19$



8) $x + 2y = 1$ $y = -\frac{1}{2}x + \frac{1}{2}$
 $5x + 3y = -23$ $y = -\frac{5}{3}x - \frac{23}{3}$

