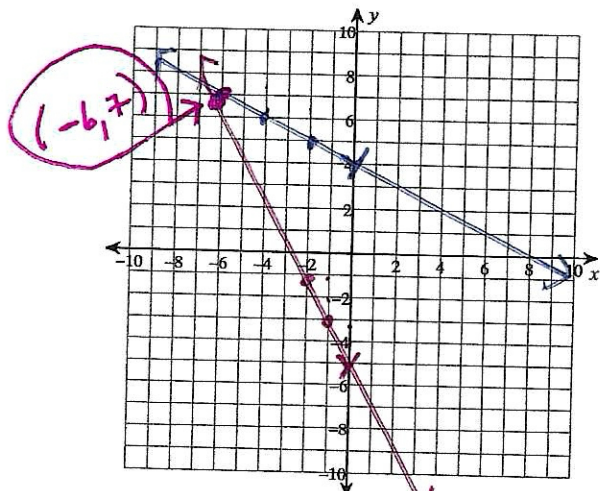


7.1 and 7.5a Practice Quiz

Date _____ Period _____

7.1 SOLVE SYSTEM BY GRAPHING - Clearly graph; AND check the solution algebraically in the original eq's

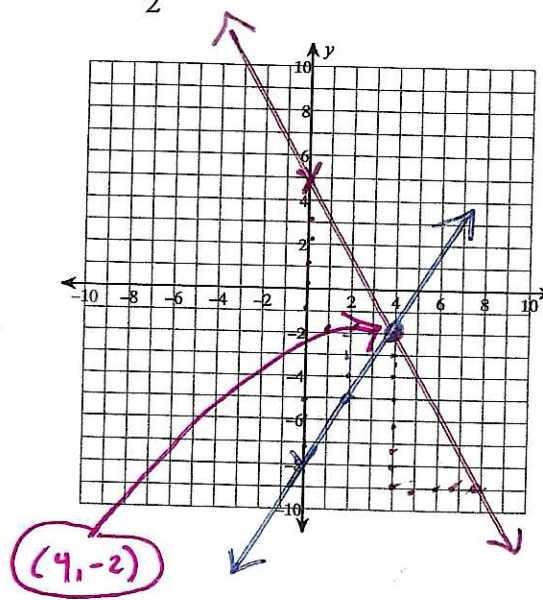
1) $y = -2x - 5$ $m = -2/1$ $b = -5$
 $y = -\frac{1}{2}x + 4$ $m = -1/2$ $b = 4$



L1: $7 = -2(-6) - 5$
 $7 = 7 \checkmark$

L2: $7 = -\frac{1}{2}(-6) + 4$
 $7 = 7 \checkmark$

2) $y = -\frac{7}{4}x + 5$ $m = -7/4$ $b = 5$
 $y = \frac{3}{2}x - 8$ $m = 3/2$ $b = -8$

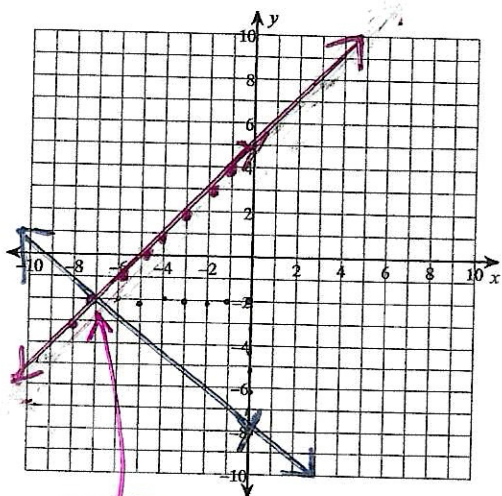


L1: $-2 = -\frac{7}{4}(4) + 5$
 $-2 = -2 \checkmark$

L2: $-2 = \frac{3}{2}(4) - 8$
 $-2 = -2 \checkmark$

3) $x - y = -5$
 $6x + 7y = -56$

$y = x + 5$ $m = 1/1$ $b = 5$



$(-7, -2)$

$$\begin{array}{r} 6x + 7y = -56 \\ -6x = -6x \\ \hline 7y = -6x - 56 \\ \frac{7y}{7} = \frac{-6x - 56}{7} \\ y = -\frac{6}{7}x - 8 \end{array}$$

Checks

L1: $(-7) - (-2) = -5$
 $-5 = -5 \checkmark$

L2: $6(-7) + 7(-2) = -56$
 $-42 - 14 = -56$
 $-56 = -56 \checkmark$

7.1 DETERMINE SOLUTIONS: Tell whether the point $(-6,4)$ is a solution to the linear equation. Explain your decision.

4) $3x + 2y = -10$
 $x - 6y = 30$

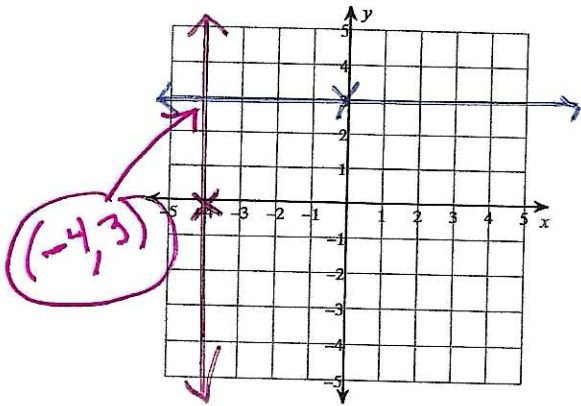
L1: $3(-6) + 2(4) = -10$
 $-18 + 8 = -10$
 $-10 = -10 \checkmark$

L2: $(-6) - 6(4) = 30$
 $-30 \neq 30 \times$

$(-6,4)$ IS NOT A SOLUTION
 b/c Line 2 DOES NOT CHECK

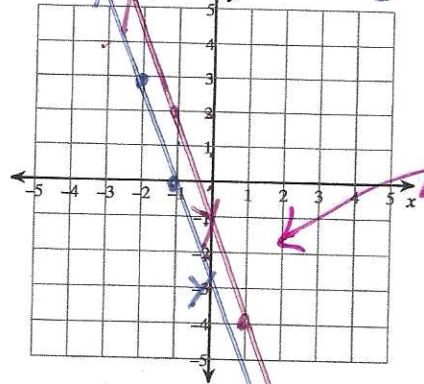
7.5a SPECIAL CASES - Solve the system by graphing. Clearly show your work putting equations into "y=mx+b"

5) $x = -4 \leftarrow$ V LINE
 $y = 3 \leftarrow$ H LINE



C(EQ1) $-4 = -4 \checkmark$
 C(EQ2) $3 = 3 \checkmark$

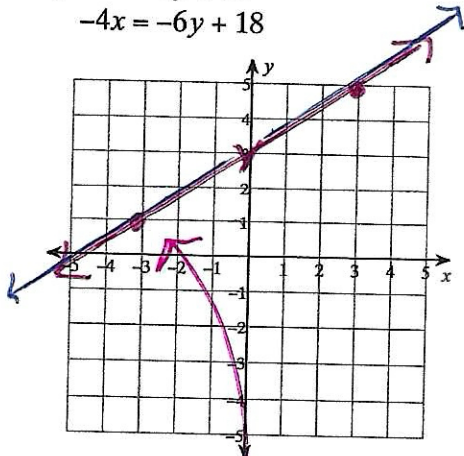
6) $3x + y = -1 \rightarrow y = -3x - 1$
 $3x + y = -3 \rightarrow y = -3x - 3$



NO SOLUTION

NOTICE: Lines are // and will never intersect

7) $-9 = -3y + 2x$
 $-4x = -6y + 18$



INFINITE SOLUTION

L1: $-9 = -3y + 2x$
 $-2x \quad y \quad -2x$

 $-3y = -2x - 9$
 $-3 \quad -3 \quad -3$

 $y = \frac{2}{3}x + 3$

L2: $-4x = -6y + 18$
 $-18 \quad -18$

 $-6y = -4x - 18$
 $-6 \quad -6 \quad -6$

 $y = \frac{2}{3}x + 3$

-2-

NOTICE: same line and solutions are all the points on it