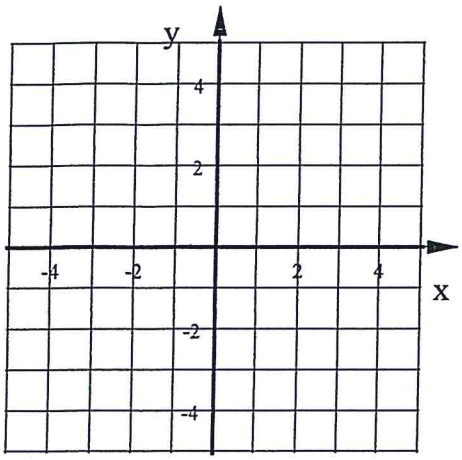
Algebra 1 Bellwork Monday, February 2, 2015

1. Is each point below a solution to this inequality? $y > 2x - 4$

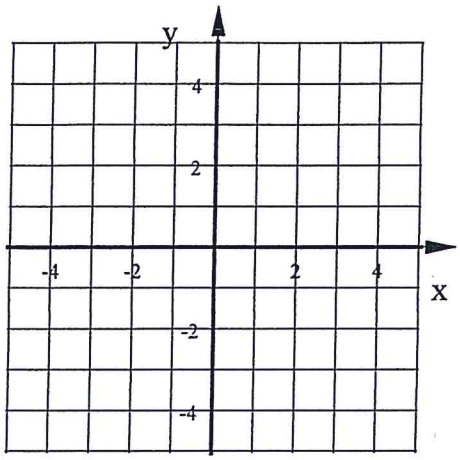
a) $(4,1)$ b) $(-1,1)$ c) $(1,-2)$

2. Graph each inequality. Shade the solution region.

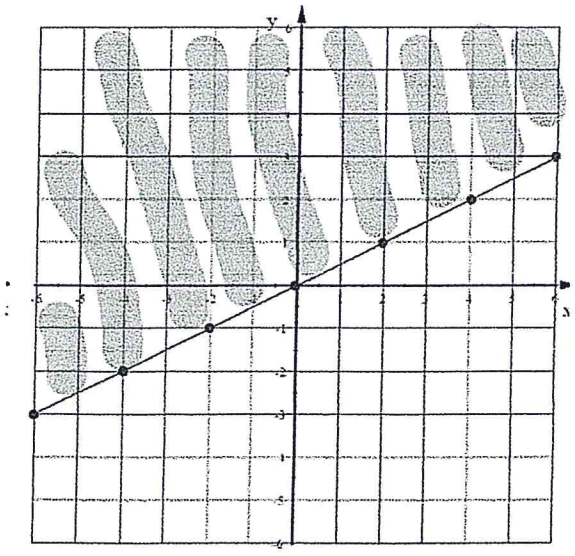
a) $y > -3x - 2$



b) $36x - 24y \geq -72$



3. Write the inequality shown in the graph below.



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ANSWERS

1. Is each point below a solution to this inequality? $y > 2x - 4$

a) $(4,1)$ b) $(-1,1)$ c) $(1,-2)$ NO

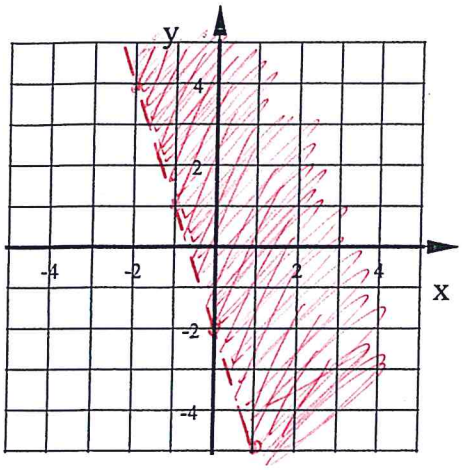
NO $1 > 2(4) - 4$
$1 > 4 \rightarrow$ False

Yes $1 > 2(-1) - 4$
$1 > -6$ True

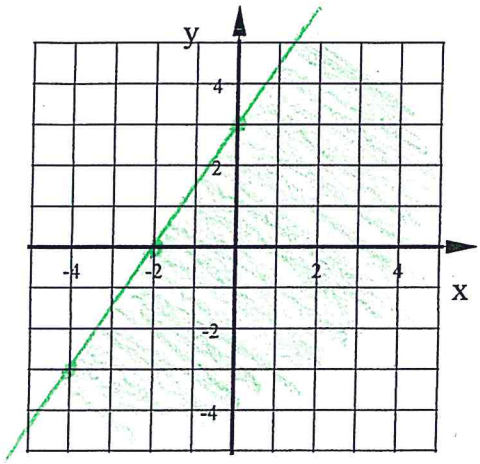
$-2 > 2(1) - 4$
$-2 > -2$ False

2. Graph each inequality. Shade the solution region.

a) $y > -3x - 2$



b) $36x - 24y \geq -72$

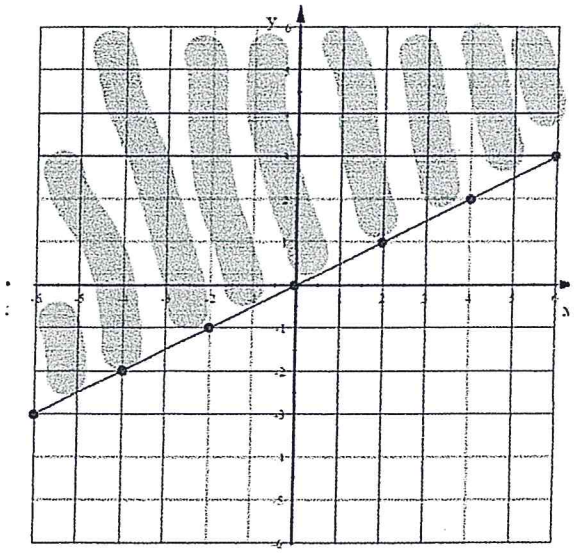


X-INT $= -72/36 = -2$

Y-INT $= \frac{-72}{-24} = 3$

TEST (0,0)
$36(0) - 24(0) \geq -72$
$0 \geq -72$
TRUE
shade the side with (0,0)

3. Write the inequality shown in the graph below.



LINE $\rightarrow$ $y = \frac{1}{2}x$

SHADE ABOVE & SOLID LINE $\rightarrow$ $y \geq \frac{1}{2}x$