Algebra 1 5.6

Graph linear inequalities

Solve inequalities (related equations)

y=mx+b

test point

Whiteboards

47 $3x - y \leq 4$

$3 \cdot 1 - 1 \leq 4$

$3 - 1 \leq 4$

$2 \leq 4$

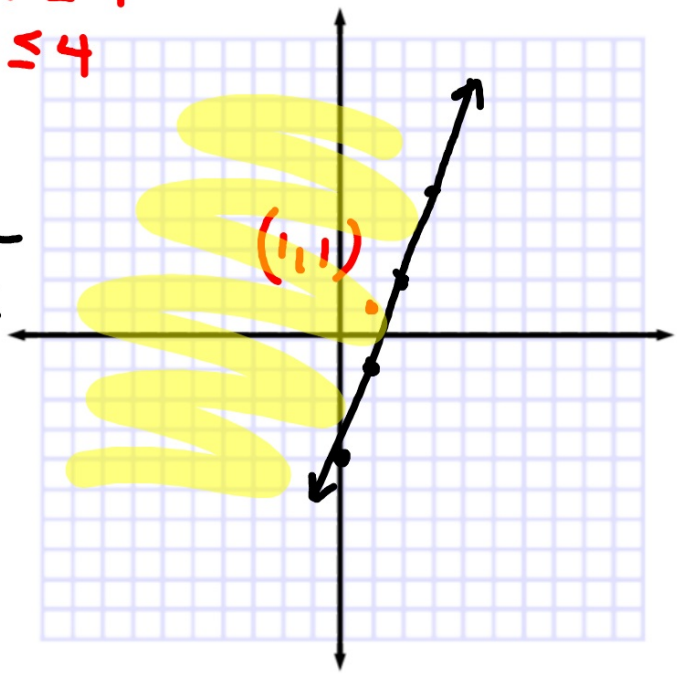
$3x - y = 4$

$-3x \quad -3x$

$-y = -3x + 4$

$\frac{-y}{-1} = \frac{-3x}{-1} + \frac{4}{-1}$

$y = 3x + -4$



Solve related equations: Where is it higher > (or lower?<)

solve each inequality.

24. $10x - 8 < 22$

$+8 \quad +8$

$\frac{10x}{10} < \frac{30}{10}$

$x < 3$

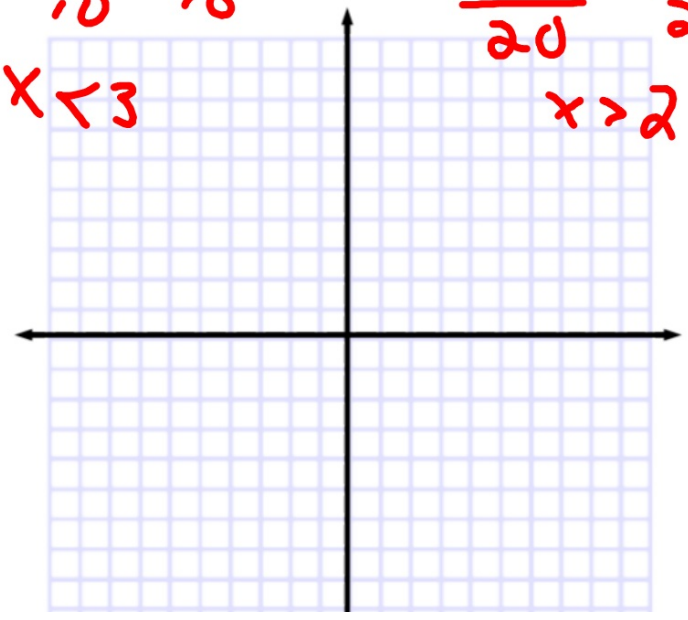
25. $20x - 5 > 35$

$+5 \quad +5$

$\frac{20x}{20} > \frac{40}{20}$

$x > 2$

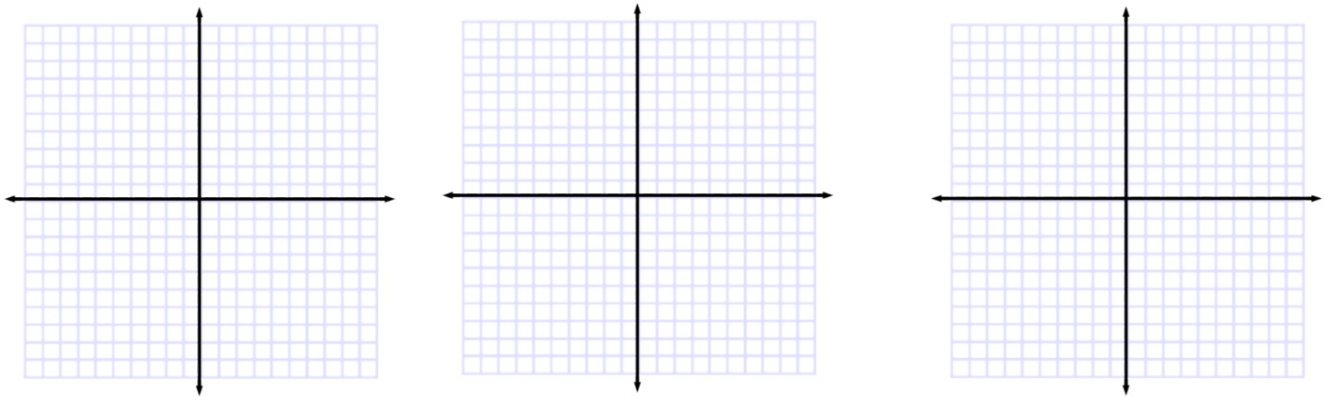
26. $4y - 77 \geq 23$



~~Use a graph to~~ solve each inequality.

31. $3x + 2 < 0$ **32.** $4x - 1 > 3$ **33.** $-6x - 8 \geq -4$

PT p. 327 odds



Solve algebraically = 1/2 credit

$3 \cdot 0 - 0 \geq 12$

$0 \geq 12$

$3x - y \geq 12$

$-3x \quad -3x$

$-y = -3x + 12$

$\frac{-y}{-1} = \frac{-3x}{-1} + \frac{12}{-1}$

$y = \frac{3}{1}x - 12$