Algebra 1 Review Ch. 5

Quiz today 5.6

Test is Mon.

(0,0)

Example 6

Graph $2x - y > 3$.

$2 \cdot 0 - 0 > 3$

$0 - 0 > 3$

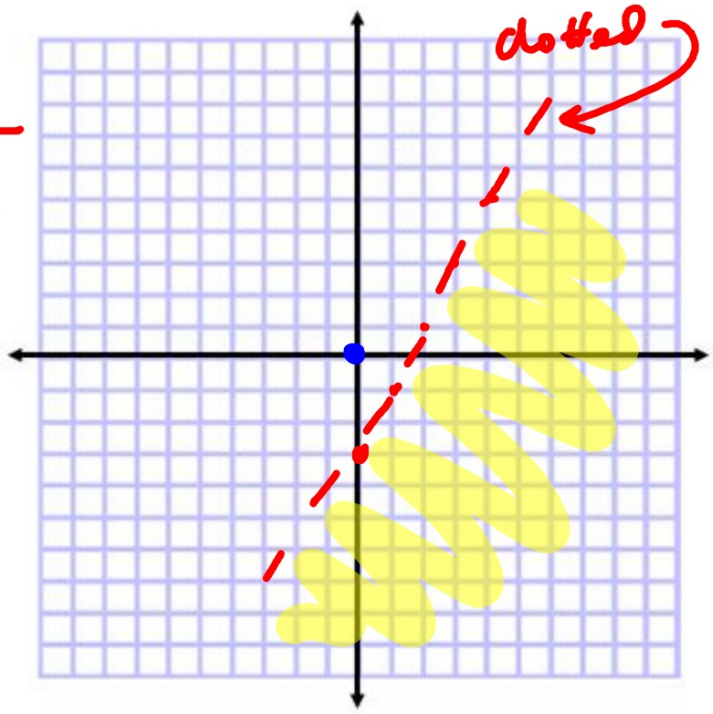
$2x - y = 3$

$-2x \quad -2x$

$-y = -2x + 3$

$\frac{-y}{-1} = \frac{-2x}{-1} + \frac{3}{-1}$

$y = \frac{2}{1}x - 3$



Example 1

Solve $x - 9 < -4$. Then graph it on a number line.

+9 +9

$x < 5$

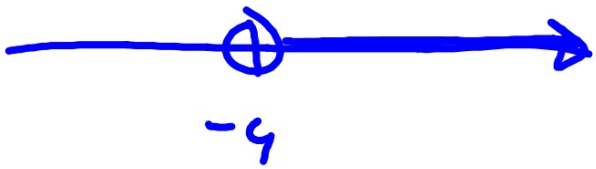
5

Example 2

Solve $-14h < 56$. Check your solution.

$\frac{-14h}{-14} > \frac{56}{-14}$

$h > -4$



$-6 \cdot -9 - 13 > 29$

$54 + -13 > 29$:)

$41 > 29$

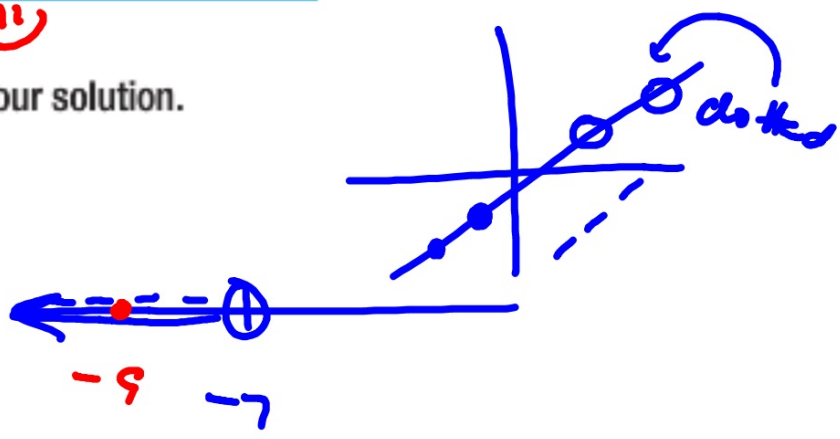
Example 3

Solve $-6y - 13 > 29$. Check your solution.

$+13 \quad +13$

$\frac{-6y}{-6} > \frac{42}{-6}$

$y < -7$



29. Four times a number decreased by 6 is less than -2. Define a variable, write an inequality, and solve for the number.

Example 4

Solve $-3w + 4 > -8$ and $2w - 11 > -19$. Then graph the solution set.

$-3w + 4 > -8$

$-4 \quad -4$

$\frac{-3w}{-3} > \frac{-12}{-3}$

$w < 4$

$2w - 11 > -19$

$+11 \quad +11$

$\frac{2w}{2} > \frac{-8}{2}$

$w > -4$

and

$-4 < w < 4$

33. $3x + 2 \leq 11$ or $5x - 8 > 22$

$-2 \quad -2$ $\qquad$ $+8 \quad +8$

$3x + 2 \leq 11$

$-2 \quad -2$

$3x \leq 9$

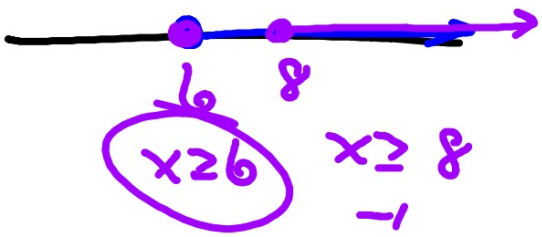
$\frac{3x}{3} \leq \frac{9}{3}$

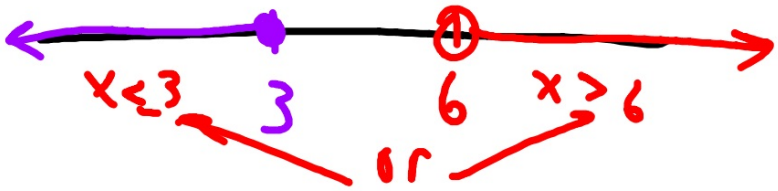
$x \leq 3$

$5x > 30$

$\frac{5x}{5} > \frac{30}{5}$

$x > 6$





Example 5

Solve $|x - 6| < 9$. Then graph the solution set.

$x - 6 = -9$

$+6 \quad +6$

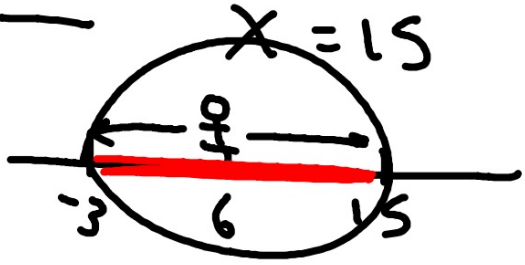
$x = -3$

$x - 6 = 9$

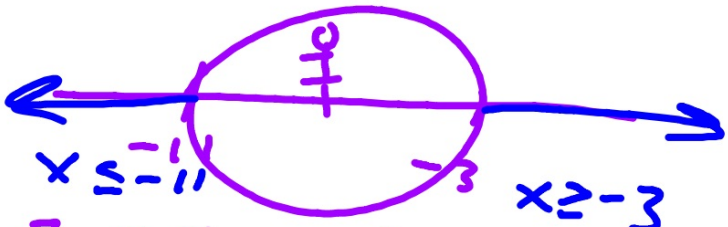
$+6 \quad +6$

$x = 15$

$-3 < x < 15$



44. $|-k-7| \geq 4$



$-k-7 = -4$
$+7 \quad +7$

$-k = 3$

$\frac{-k}{-1} = \frac{3}{-1}$

$k = -3$

$-k-7 = 4$
$+7 \quad +7$

$-k = 11$

$\frac{-k}{-1} = \frac{11}{-1}$

$k = -11$

within 5° of 75°

$70 \leftrightarrow 80$

$|x - 75| \leq 5$