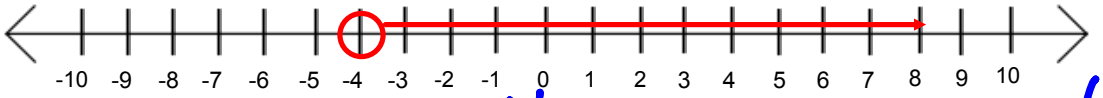
Warm - Up

*~~Staple your journal to your yellow sheets(questions and rubric) and turn it in!~~

1. Write an inequality for the graph



$-4 < x$ $x > -4$

2. Solve for x: $-\frac{2}{3}x - 6 \geq -29$

$+6 \quad +6$

$\left(-\frac{3}{2}\right)\left(-\frac{2}{3}x\right) \leq -23\left(-\frac{3}{2}\right)$

~~$x \leq 34.5$~~

$x \leq \frac{69}{2}$

3. Solve for y: $24 = 12y - 4x$

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

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

$2 + \frac{1}{3}x$

Solving Compound Inequalities

$-1 < 9 + n < 17$

$-1 < 9 + n$

$-9 \quad -9$

$-10 < n$

$9 + n < 17$

$-9 \quad -9$

$n < 8$

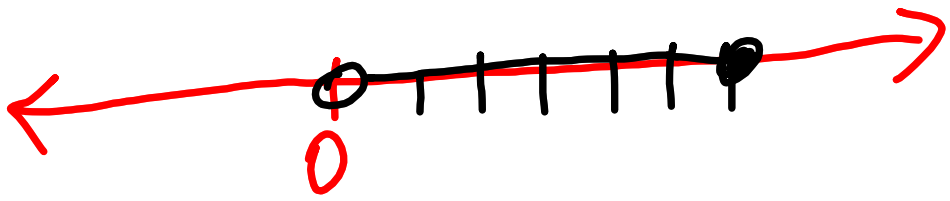
$-10 < n < 8$

$$-3 \leq \frac{p}{-2} < 0$$

$(-2)(-3) \leq \frac{p}{-2}(-2)$ | $(-2)\frac{p}{-2} < 0(-2)$

$6 \geq p$ | $p > 0$

$6 \geq p > 0$



$-3x + 7 < 8$ or $5 - 2x \leq -9$

$-7 \quad -7$

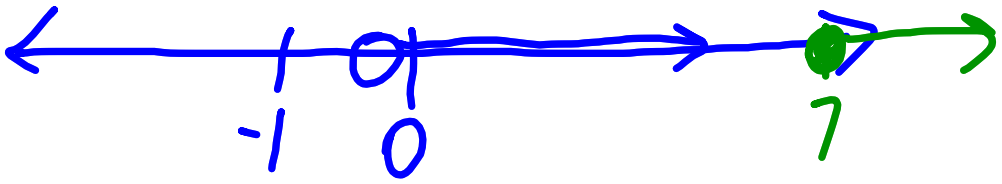
$\frac{-3x}{-3} < \frac{1}{-3}$

$x > -\frac{1}{3}$

$-5 \quad -5$

$\frac{-2x}{-2} \leq \frac{-14}{-2}$

$x \geq 7$



To earn a B in your math course, you must achieve a score between an 84 and 86. You scored an 86, 85 and 80 on the first three tests. What possible scores can you earn on the fourth and final test to earn a B in the course?

$$84 \le \frac{x+80+85+86}{4} \le 86$$

$$4 \cdot 84 \le \frac{251+x}{4} \le 86 \cdot 4$$

$$336 \le 251 + x \le 344$$

$$-251 \qquad\qquad -251$$

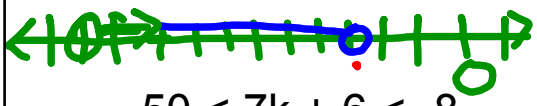
$$85 \le x \le 93$$

Solve AND graph

-36 < 3p - 6 < -15

$-30 < 3p$ $\quad 3p < -9$

$-10 < p$ $\quad p < -3$



-50 < 7k + 6 < -8

$-50 < 7k + 6$ $\quad 7k + 6 < -8$

$-56 < 7k$ $\quad 7k < -14$

$-8 < k$ $\quad k < -2$

$-8 < k < -2$

-6 < -5x - 2 < 13

$-6 < -5x - 2$ $\quad -5x - 2 < 13$

$-4 < -5x$ $\quad -5x < 15$

$\frac{4}{5} > x$ $\quad x > -3$

3x + 5 < 20 or 2x - 1 > 13

$3x < 15$ $\quad 2x - 1 > 13$

$x < 5$ $\quad 2x > 14$

$x > 7$

September 23, 2019