Test 1 Wednesday

Smaller $|\text{☺}| < 7 \Rightarrow$ Either one interval or no solution.

$\text{☺} < 7$ AND $\text{☺} > -7$

Bigger $|\text{☺}| > 7 \Rightarrow$ Usually 2 intervals, sometimes the whole real line.

$\text{☺} > 7$ OR $\text{☺} < -7$

$|\text{☺}| < -7$ Nevah! $\varnothing$

$|\text{☺}| > -7$ Always $(-\infty, \infty)$

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$|4x-11| > -1$ $\mathbb{R}$

$(-\infty, \infty)$ Always.

** $|4x-11| < -1$ Nevah!

74 $8 + |5x-3| \geq 11$

$-8 \quad = -8$

$|5x-3| \geq 3$ Beatriz

$5x-3 \geq 3$ OR $5x-3 \leq -3$

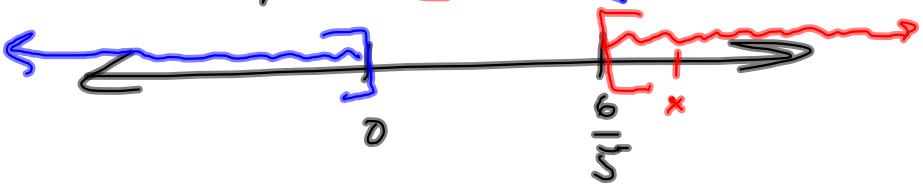
$+3 = +3$ $+3 = +3$

$5x \geq 6$ $5x \leq 0$

$x \geq \frac{6}{5}$ $x \leq \frac{0}{5} = 0$

OR $x \leq 0$

$\{x \mid x \geq \frac{6}{5}$ OR $x \leq 0\}$

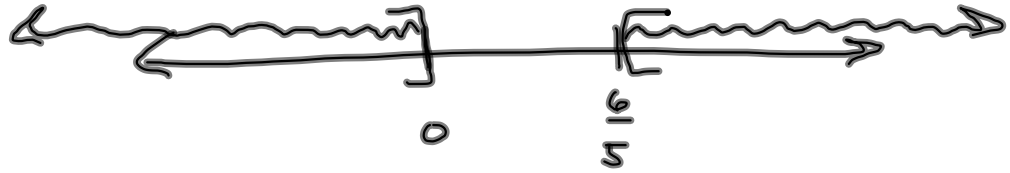


$(-\infty, 0] \cup [\frac{6}{5}, \infty)$

Separate Question

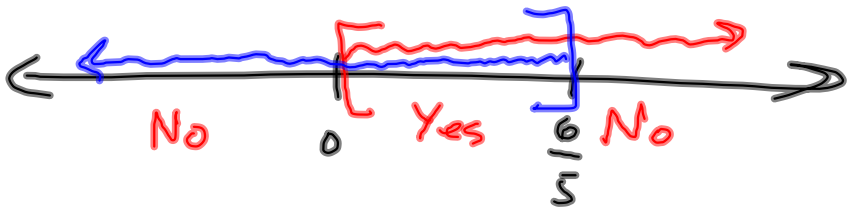
$\{x \mid x \leq 0 \text{ AND } x \geq \frac{6}{5}\}$ -

What's it look like?



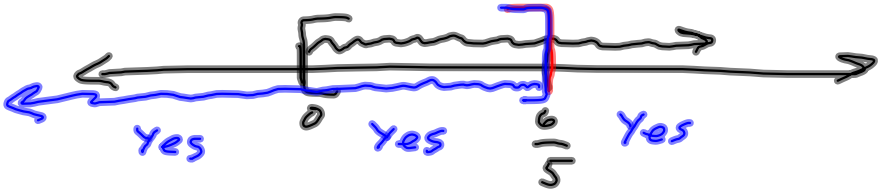
$= \emptyset$

$\{x \mid x \geq 0 \text{ AND } x \leq \frac{6}{5}\}$

$=$ 

$= [0, \frac{6}{5}]$

$\{x \mid x \geq 0 \text{ OR } x \leq \frac{6}{5}\}$



$= (-\infty, \infty)$