

Graph the following equations (solve when necessary)...

1.) $a \leq -5$



2. $p - 5 \geq 2$



3. $-4 \leq p + 5$

$-9 \leq p$

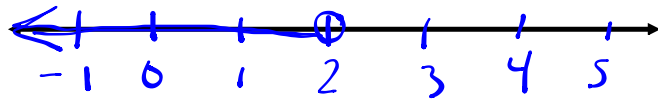
$p \geq -9$



$$3a + 5 < 11$$

$$\frac{3a}{3} < \frac{6}{3}$$

$$a < 2$$



NOTE...this different equation!!

$$-3a + 5 \leq 11$$

$$\frac{-3a}{-3} \leq \frac{6}{-3}$$

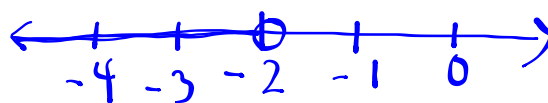
note
↳

$$a \geq -2$$



When multiplying or dividing an inequality by a negative number the inequality changes direction.

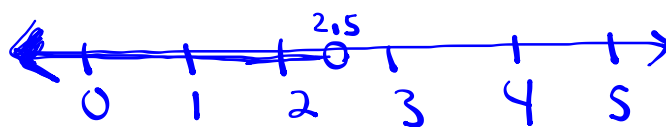
$$\begin{aligned} -a &> 2 = \\ \left(\begin{array}{l} -1a > 2 \\ \frac{-1}{-1} \quad \frac{-1}{-1} \end{array} \right) \\ &\rightarrow a < -2 \end{aligned}$$



$$-2.5 < -c$$

$$\frac{-c}{-1} > \frac{-2.5}{-1}$$

$$c < 2.5$$



Homework

Worksheet #1 on inequalities