Recap:

Linear Inequalities

Solving linear inequalities is very similar to solving linear equations

Ex 1

$$2x + 3 < 11$$

$$2x < 11 - 3$$

$$2x < 8$$

$$x < \frac{8}{2}$$

$$x < 4$$

Multiplying or dividing by a negative number causes the inequality to be reversed

Ex 2

$$3x - 7 \geq 8x + 23$$

$$3x - 8x \geq +23 + 7$$

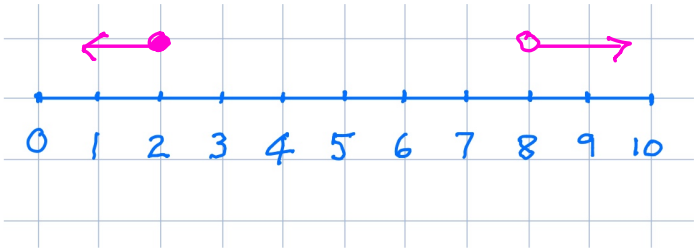
$$-5x \geq +30$$

$$x \leq \frac{+30}{-5}$$

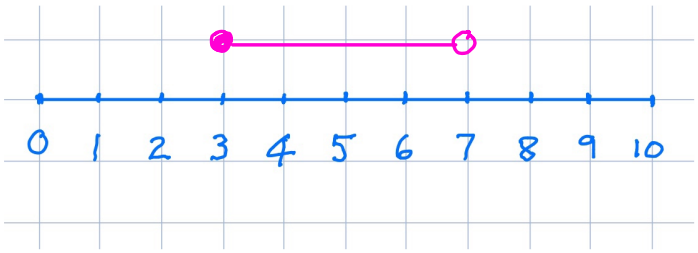
$$x \leq -6$$

Representing Inequalities On A Number Line

$x \leq 2$



$x > 8$



$3 \leq x < 7$