

M9 - 9.0 - Inequalities Review

5 is less than 8.
8 is greater than 5.

$$5 < 8$$

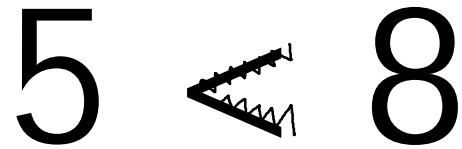
$$8 > 5$$

7 is less than or equal to 7.
9 is greater than or equal to 7.

$$7 \leq 7$$

$$9 \geq 7$$

The alligator eats the bigger section.



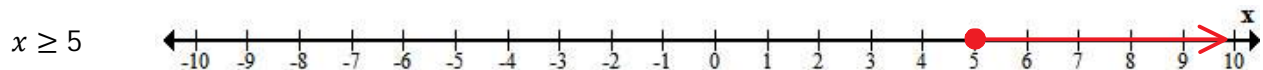
\leq, \geq \bullet $[]$ —

Included (closed, square, solid)

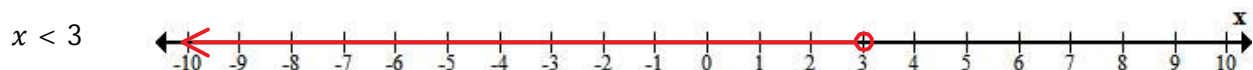
$<, >$ \circ $()$ $(-\infty, \infty)$ $---$

Not Included (open, round, dotted)

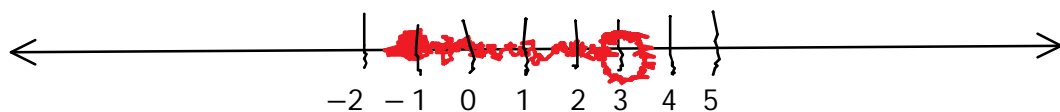
Sketching Inequalities



Place a **closed circle** at 5 (when a x can equal 5)
Draw a line with an arrow to the right (greater than)



Place an **open circle** at 3 (when x cannot equal 3)
Draw a line with an arrow to the left (less than)



$$-1 \leq x < 3$$

Inbetween