



# Intervals

## inequalities

- $<, >$  → open circle  
not including end pts
- $\leq, \geq$  → closed circle  
at most, at least, including end pts


## examples

1.   $-5 < x \leq 2$

2.   $x < 0 \text{ \& } x > 4$

3.  $k$  is at most 5  $k \leq 5$

4.  $m$  must be btwn  $-10 \text{ \& } \frac{3}{2}$   
 $-10 < m < \frac{3}{2}$

5.  $-6 \leq b \leq 8$   


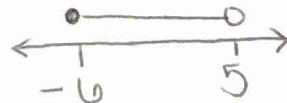
## interval notation

- $( )$  → open circle,  $<, >$ ,  $-\infty, \infty$
- $[ ]$  → closed circle,  $\leq, \geq$

\*always goes least, greatest


## examples

1.   $(-\infty, -4)$

2.   $[-6, 5)$

3.  $-7 < k < 10$   $(-7, 10)$

4.  $j$  is at least 9  $[9, \infty)$

5.   $(-\infty, 3] \cup (7, \infty)$