
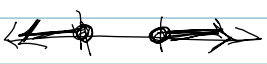
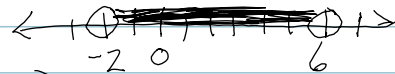


Lesson 119: Absolute Value Inequalities

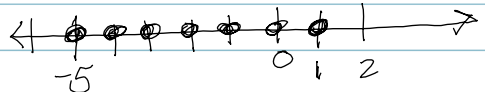
$|x| \leq N$ conjunction $-N \leq x \leq N$ (and) 

$|x| \geq N$ Disjunction $x \leq -N$ or $x \geq N$ 

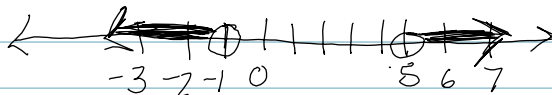
1.) Graph $\{x \in \mathbb{R} \mid |x-2| < 4\}$
 $-4 < x-2 < 4$
 $-2 < x < 6$



2.) Graph $\{x \in \mathbb{J} \mid |x+2| \leq 3\}$
 $-3 \leq x+2 \leq 3$
 $-5 \leq x \leq 1$



3.) Graph $\{x \in \mathbb{R} \mid |x-2| > 3\}$
 $x-2 < -3$ or $x-2 > 3$
 $x < -1$ $x > 5$



4.) Graph $\{x \in \mathbb{J} \mid |x+2| > 4\}$

$x+2 < -4$ $x+2 > 4$
 $x < -6$ $x > 2$

