

Review: Solving Absolute Value Inequalities

Solve each inequality. Graph the solution.

1) $|2x| < 4$

2) $|4x| \geq 16$

3) $|x+1| > 6$

4) $|2x-1| \leq 5$

5) $|x+4|-3 > 4$

6) $|2x-1|+1 < 5$

7) $3|x+1|+4 \leq 7$

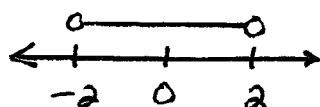
8) $-2|x-3|+4 > 2$

9) $|5x-1| > -3$

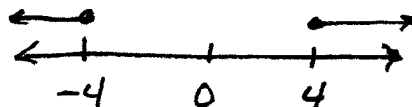
10) $|2x+4| < -8$

Answers:

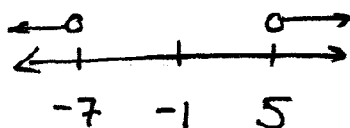
1) $-2 < x < 2$



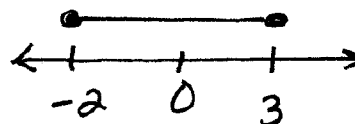
2) $x \leq -4$ OR $x \geq 4$



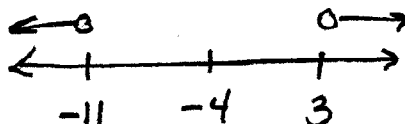
3) $x < -7$ OR $x > 5$



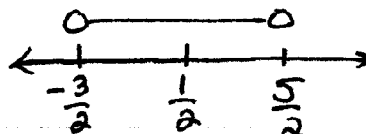
4) $-2 \leq x \leq 3$



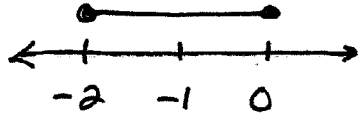
5) $x < -11$ OR $x > 3$



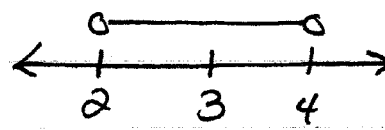
6) $-\frac{3}{2} < x < \frac{5}{2}$



$$7) -2 \leq x \leq 0$$



$$8) 2 < x < 4$$



$$9) \forall \mathbb{R}$$

$$10) \emptyset$$