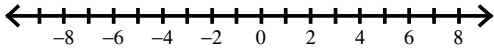
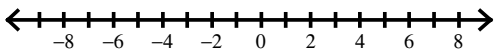
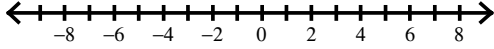
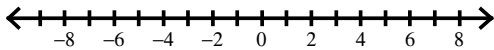
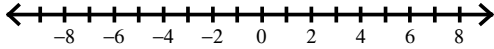
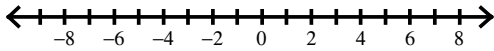
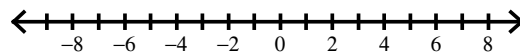


Name:	Date:
Topic:	Class:

Main Ideas/Questions	Notes	
Absolute Value Inequalities	<p style="text-align: center;"><b>GREATER THAN/GREATER THAN OR EQUAL TO</b></p> <p><b>CASE 1</b></p> <p>Example: <math> x  \geq 5</math></p>  <p style="text-align: center;">Interval Notation:</p>	
	<p style="text-align: center;"><b>LESS THAN/LESS THAN OR EQUAL TO</b></p> <p><b>CASE 2</b></p> <p>Example: <math> x  \leq 8</math></p>  <p style="text-align: center;">Interval Notation:</p>	
	What does this mean?	
	Steps to solve	<p><b>ISOLATE</b> the absolute value expression.</p> <p><b>CREATE TWO CASES:</b> Use the "KISS" Method (Keep it, switch, switch) to set up the two cases.</p> <p><b>SOLVE</b> both inequalities.</p> <p><b>GRAPH</b> the solution and write your answer in interval notation.</p>

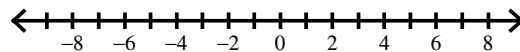
<b>Directions:</b> Solve, graph, and write the solutions to the following inequalities in interval notation.	
1. $ x  < 7$	 <p style="text-align: center;">Interval Notation:</p>
2. $ x  \geq 4$	 <p style="text-align: center;">Interval Notation:</p>
3. $ x - 1  > 6$	 <p style="text-align: center;">Interval Notation:</p>
4. $ x + 2  \leq 7$	 <p style="text-align: center;">Interval Notation:</p>

5.  $|2x + 5| \geq 3$



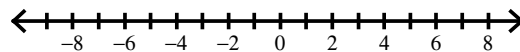
Interval Notation:

6.  $|x + 3| - 1 < 5$



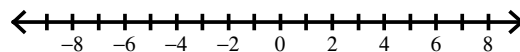
Interval Notation:

7.  $3|2x + 8| \geq 30$



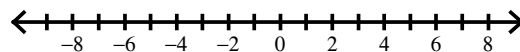
Interval Notation:

8.  $\frac{|4x - 8|}{-2} \leq -6$



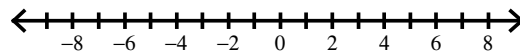
Interval Notation:

9.  $10|x - 4| - 3 > 47$



Interval Notation:

10.  $\frac{1}{2}|4x - 4| + 11 \leq 15$



Interval Notation: