



Solving Absolute Value Inequalities Class Work

 **Objective:** Today you will be able to combine your knowledge of solving inequalities and solving absolute value equations to solve and graph your solutions to absolute value inequalities.

 **Example:** Solve and graph your solution to the inequality.

$$6|6 - 2p| + 3 \geq 15$$

Now, let's summarize the steps...

First we _____.

Then we _____.

The first equation

The second equation

Always remember to...

Finally,

 **Now You Try Some!**

Solve and graph your solution to each inequality. Also write your solution as a compound inequality.

1. $|b + 1| + 9 > 18$

2. $4|-k + 7| \geq 20$

3. $5|4n - 5| - 10 < 50$

4. $3 \leq 4|v - 1| - 5$

5. $12 > 7|6v + 8| - 2$

6. $-2|m - 8| + 5 \leq -7$

One Last Problem Before You Leave: Solve & graph.

$$3|8 - x| + 1 < 10$$

Do you have any questions for me about today's lesson? If so, write them.

