Name: _____ Class: _____ Date: _____ ID: A

Lesson #11 B-2: Understanding, Solving, and Graphing Absolute Value Equations and Inequalities (Reference: Lesson #74, #91, #94 & #101 in book)

Problem

1. **For each of the following equations please solve for x and express the solution in solution set notation.**

   1. $|2x-4|=6$

2. $|3x+9|-5=7$

3. $3|2x+6|-8=16$

4. $-3|2(x-4)-x+4|+8=-16$

5. $6|4(x-4)+2(-x+6)|-7=41$

6. **For each of the following inequalities please solve for x, graph the inequality, and give me the solution in interval notation.**

   6. $|4x-12|\le 4$

7. $|-3x-3|+8>14$

8. $5|2x+3|-3\ge 22$

9. $3|2(2x-3)-2x+2|+4\le 22$

10. $4|-3(x-2)+2(2x+1)-3x|-4<16$