GPS Algebra

Lesson 2.2 Day 1

Purple Book

Standard: MM2A1c

Objective: To solve absolute value equations.

**Vocabulary**

**Extraneous Solution**: is an apparent solution that must be rejected because it does not satisfy the original equation.

**Absolute Value**: The distance of a number from 0.

**Decide whether the number is a solution of the equation.**

1. $\left|3x+4\right|=8;-4$
2. $\left|2x-3\right|=7;2$
3. $\left|5x-4\right|=6;2$
4. $\left|5-3x\right|=8;1$

**Solve the equation**

$$\left|ax+b\right|=c$$

Set the equation inside the absolute value brackets to the positive and negative value of what *c* is.

$ax+b=c$ $ax+b=-c$

Then solve for *x*.

1. $\left|4x\right|=12$
2. $\left|8-4x\right|=12$
3. $\left|x+3\right|=7$
4. $\left|y-2\right|=6$
5. $\left|2t-5\right|=9$
6. $\left|2x+1\right|=9$
7. $\left|5x-10\right|=0$
8. $\left|-3x-9\right|=0$
9. $\left|2x+6\right|=14$
10. $\left|5-5x\right|=3$

**HW: Pg 30 #1-16 (all)**