HA1

Absolute Value Equations

**Absolute value** is:

When evaluating absolute value expressions, treat the bars as

* Example: $8.4-\left|2x+5\right|, if x= -7.5$

Formal Definition:
 For any real numbers a and b, where $b\geq 0, if \left|a\right|=b, then a=b or -a=b (a=-b)$

Steps to solve:

1. .
2. .
3. .
4. .
5. .

Practice:

1. $\left|x+12\right|=9$
2. $8=\left|y+5\right|$
3. $3\left|2x-3\right|-5=4$

**Special Cases:**

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

HW: Solve each equation. Be sure to check your solutions.

1.  b. 

c.  d. 

e.  f. 

g.  h. 