

# HW Worksheet Key

Tuesday, September 15, 2015  
6:04 AM

*Always Check Solutions!*

Integrated Honors  
Absolute Value Eqn. Practice

Name \_\_\_\_\_  
Date \_\_\_\_\_ Period \_\_\_\_\_

No Calculator!! Show work on a separate piece of paper ☺

1.  $|x-4|=9$       2.  $8|2x+4|=64$       3.  $2|x-5|-7=3$       4.  $-4|3x+24|=48$   
5.  $3|2x-\frac{3}{8}|=18$       6.  $|3x+6|=-12$       7.  $-4|4x+4|+11=-1$

①  $x-4=9$  or  $x-4=-9$   
 $x=13$  or  $x=-5$  check

②  $8|2x+4|=64$   
 $|2x+4|=8$   
 $2x+4=8$  or  $2x+4=-8$   
 $2x=4$        $2x=-12$   
 $x=2$  or  $x=-6$

③  $2|x-5|-7=3$   
 $2|x-5|=10$   
 $|x-5|=5$   
 $x-5=5$  or  $x-5=-5$   
 $x=10$  or  $x=0$

④  $|3x+24|=-12$  ⚡  
No Solution!

⑤  $|2x-\frac{3}{8}|=6$   
 $2x-\frac{3}{8}=6$  or  $2x-\frac{3}{8}=-6$   
 $2x=\frac{51}{8}$        $2x=-\frac{45}{8}$

$x=\frac{51}{16}$  or  $x=-\frac{45}{16}$

⑥ No Solution!

⑦  $-4|4x+4|+11=-1$   
 $-4|4x+4|=-12$   
 $|4x+4|=3$   
 $4x+4=3$  or  $4x+4=-3$   
 $4x=-1$        $4x=-7$   
 $x=-\frac{1}{4}$  or  $x=-\frac{7}{4}$