

Name: \_\_\_\_\_

Score: \_\_\_\_\_

<b>Solve the Absolute Value Equation</b>
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T3ES2

Solve each equation.

1) $8 x + 2  = 4$	2) $ 3x + 7  = 11$	3) $5 x - 3  = 5$
Solution =	Solution =	Solution =
4) $\frac{3}{2} x + 7  = 2$	5) $2 -x - 1  = 6$	6) $4 x - 9  = 6$
Solution =	Solution =	Solution =
7) $9 x + 3  = 1$	<div style="border: 2px solid #007bff; padding: 10px; background-color: #e0f0ff;"> <h1 style="margin: 0; color: #007bff;">PREVIEW</h1> <p style="margin: 5px 0; color: #007bff;">Gain complete access to the largest collection of worksheets in all subjects!</p> <div style="display: flex; justify-content: space-around; margin: 10px 0;"> <div style="background-color: #007bff; color: white; padding: 10px; transform: rotate(-2deg); text-align: center;"> <p style="margin: 0;">Members, please log in to download this worksheet.</p> </div> <div style="background-color: #007bff; color: white; padding: 10px; transform: rotate(2deg); text-align: center;"> <p style="margin: 0;">Not a member? Please sign up to gain complete access.</p> </div> </div> <p style="margin: 10px 0; color: #007bff;"><a href="http://www.mathworksheets4kids.com">www.mathworksheets4kids.com</a></p> </div>	
Solution =		
10) $2 x + 6  = 4$		
Solution =		
13) $\frac{ x+2 }{3} = 12$	7) $ x - 5  = 56$	
Solution =	Solution =	
16) $2\left -x + \frac{3}{2}\right  = 11$	17) $ 3 - 4x  = 5$	18) $3 9 - 2x  = 7$
Solution =	Solution =	Solution =

Name: \_\_\_\_\_

Answer key

Score: \_\_\_\_\_

## Solve the Absolute Value Equation

T3ES2

1)  $8|x + 2| = 4$

Solution =  $\left\{-\frac{5}{2}, -\frac{3}{2}\right\}$

2)  $|3x + 7| = 11$

Solution =  $\left\{-6, \frac{4}{3}\right\}$

3)  $5|x - 3| = 5$

Solution =  $\{2, 4\}$

4)  $\frac{3}{2}|x + 7| = 2$

Solution =  $\left\{-\frac{17}{3}, -\frac{11}{3}\right\}$

5)  $2|-x - 1| = 6$

Solution =  $\{-2, 4\}$

6)  $4|x - 9| = 6$

Solution =  $\left\{\frac{15}{2}, \frac{21}{2}\right\}$

7)  $9|x + 3| = 1$

Solution =  $\left\{-\frac{28}{9}, -\frac{10}{9}\right\}$

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$|x - 5| = 56$

Solution =  $\{-1, 1\}$

10)  $2|x + 6| = 9$

Solution =  $\left\{-\frac{21}{2}, -\frac{9}{2}\right\}$

$-x| = 5$

Solution =  $\left\{\frac{19}{8}, \frac{29}{8}\right\}$

13)  $\frac{|x+2|}{3} = 12$

Solution =  $\{-38, 34\}$

Solution =  $\left\{-\frac{7}{5}, 1\right\}$

Solution =  $\left\{-\frac{36}{7}, -\frac{34}{7}\right\}$

16)  $2\left|-x + \frac{3}{2}\right| = 11$

Solution =  $\{-4, 7\}$

17)  $|3 - 4x| = 5$

Solution =  $\left\{-\frac{1}{2}, 2\right\}$

18)  $3|9 - 2x| = 7$

Solution =  $\left\{\frac{10}{3}, \frac{17}{3}\right\}$