

Name: _____

Score: _____

Solve the Absolute Value Equation

T4ES2

Solve each equation.

1) $5 - x - 1 = -3$	2) $2 -x - 7 - 10 = -9$	3) $4\left \frac{x}{2} + 3\right + 1 = 5$
Solution =	Solution =	Solution =
4) $7 - 3x + 9 = -1$	5) $2 5x - 10 - 10 = -10$	6) $3 2x + 1 + 9 = -7$
Solution =	Solution =	Solution =
7) $5 4x + 3 = 15$	<div style="border: 2px solid #007bff; padding: 10px; background-color: #e6f2ff;"> <h1 style="margin: 0; color: #007bff;">PREVIEW</h1> <p style="margin: 5px 0 0 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: 5px; 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: 5px; 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 0 0; color: #007bff;">www.mathworksheets4kids.com</p> </div>	
Solution =		
10) $- 7x + 8 + 2 = 11$		
Solution =		
13) $\frac{ 2x-1 }{2} = 1$	14) $3 2x + 1 + 1 = 2$	15) $2 3x + 1 + 9 = -7$
Solution =	Solution =	Solution =
16) $3 - 4 5x + 3 = 2$	17) $4 3x + 2 - 1 = 5$	18) $7 -x - 2 - 3 = 4$
Solution =	Solution =	Solution =

Name: _____

Answer key

Score: _____

Solve the Absolute Value Equation

T4ES2

1) $5 - |x - 1| = -3$

Solution = $\{-7, 9\}$

2) $2|-x - 7| - 10 = -9$

Solution = $\{-\frac{15}{2}, -\frac{13}{2}\}$

3) $4\left|\frac{x}{2} + 3\right| + 1 = 5$

Solution = $\{-4, -8\}$

4) $7 - |3x + 9| = 1$

Solution = $\{-5, -$

5) $|9x - 2| + 5 = 10$

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6) $-|x + 1| + 9 = -7$

= $\{-17, 15\}$

7) $5|4x + 3| =$

+ 2 = 11

Solution = $\{-\frac{27}{20},$

= $\{-3, 3\}$

10) $-|7x + 8| +$

+ 3| + 1 = 2

Solution = $\{-\frac{10}{7},$

= $\{-\frac{7}{10}, -\frac{1}{2}\}$

13) $\frac{|2x-1|}{2} = 1$

+ 8| - 10 = 6

Solution = $\{-\frac{1}{2}, \frac{3}{2}\}$

Solution = $\{3, 7\}$

Solution = $\{-6, 2\}$

16) $3 - 4|5x + 3| = 2$

17) $4|3x + 2| - 1 = 5$

18) $7|-x - 2| - 3 = 4$

Solution = $\{-\frac{13}{20}, -\frac{11}{20}\}$

Solution = $\{-\frac{7}{6}, -\frac{1}{6}\}$

Solution = $\{-3, -1\}$