

Name: _____

Score: _____

Solve the Absolute Value Equation
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T4MS1

Solve each equation.

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

Name: _____

Answer key

Score: _____

Solve the Absolute Value Equation

T4MS1

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

Solution = $\left\{\frac{1}{2}, \frac{3}{2}\right\}$

2) $-5|-x + 4| - 6 = -2$

Solution = $\left\{\frac{16}{5}, \frac{24}{5}\right\}$

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

Solution = $\left\{-\frac{11}{3}, -\frac{1}{3}\right\}$

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

Solution = $\{-30, 1\}$

5) $2 + \frac{|x-4|}{5} = 9$

Solution = $\{-4, 14\}$

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

Solution = $\left\{-\frac{4}{3}, 0\right\}$

7) $\frac{4}{|2x-1|} + 1 = 5$

Solution = $\{0, 1\}$

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$\left|\frac{x}{4}\right| = -5$

Solution = $\{-28, 28\}$

10) $2|x - 1| - 8 = -3x + 2 = 11$

Solution = $\{-6, 8\}$

Solution = $\left\{-\frac{1}{6}, \frac{5}{6}\right\}$

13) $8 - \frac{|2-x|}{3} = -1$

Solution = $\{-28, 32\}$

$\left|\frac{x}{7} + 4\right| = 1$

Solution = $\{-16, 12\}$

Solution = $\{-42, -14\}$

16) $2|x - 1| + 4 = 12$

Solution = $\{-3, 5\}$

17) $8|-x + 1| - 1 = 3$

Solution = $\left\{\frac{1}{2}, \frac{3}{2}\right\}$

18) $4 - \left|\frac{x}{3} - 2\right| = -6$

Solution = $\{-24, 36\}$