

Name: _____

Score: _____

Solve the Absolute Value Equation
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T3MS2

Solve each equation.

1) $5 3x - 1 = 7$	2) $4 -x + 2 = 5$	3) $\left \frac{x}{3} - 2\right = \frac{1}{3}$
Solution =	Solution =	Solution =
4) $ 4 - x = 8$	5) $\frac{5}{6} -x + 2 = \frac{1}{2}$	6) $4\left x + \frac{1}{4}\right = 5$
Solution =	Solution =	Solution =
7) $\frac{8}{3} 3 - x = 5$	<div style="border: 2px solid #0070C0; padding: 10px; margin: 0 auto; width: 80%;"> <h1 style="margin: 0; color: #0070C0; font-size: 2em;">PREVIEW</h1> <p style="margin: 5px 0; color: #0070C0; font-size: 1.2em;">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: #0070C0; color: white; padding: 10px; width: 40%; transform: rotate(-2deg);"> <p style="margin: 0; font-size: 0.9em;">Members, please log in to download this worksheet.</p> </div> <div style="background-color: #0070C0; color: white; padding: 10px; width: 40%; transform: rotate(2deg);"> <p style="margin: 0; font-size: 0.9em;">Not a member? Please sign up to gain complete access.</p> </div> </div> <p style="margin: 10px 0; color: #0070C0; font-size: 0.8em;">www.mathworksheets4kids.com</p> </div>	
Solution =		
10) $3 6x - 2 =$		
Solution =		
13) $\frac{3}{4 x+2 } = 6$		
Solution =	Solution =	Solution =
16) $3\left x - \frac{1}{5}\right = \frac{6}{5}$	17) $ -2x + 1 = 3$	18) $4\left \frac{x}{3} + 2\right = 2$
Solution =	Solution =	Solution =

Name: _____

Answer key

Score: _____

Solve the Absolute Value Equation

T3MS2

1) $5|3x - 1| = 7$

Solution = $\left\{-\frac{2}{15}, \frac{4}{5}\right\}$

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

Solution = $\left\{\frac{3}{4}, \frac{13}{4}\right\}$

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

Solution = $\{5, 7\}$

4) $|4 - x| = 8$

Solution = $\{-4, 12\}$

5) $\frac{5}{6}|-x + 2| = \frac{1}{3}$

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

6) $4\left|x + \frac{1}{4}\right| = 5$

Solution = $\left\{-\frac{5}{4}, \frac{35}{4}\right\}$

7) $\frac{8}{3}|3 - x| = 5$

Solution = $\left\{\frac{9}{8}, \frac{33}{8}\right\}$

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10) $3|6x - 2| = 5$

Solution = $\left\{\frac{1}{9}, \frac{5}{9}\right\}$

$5|x + 5| = 2$

Solution = $\{3, 7\}$

13) $\frac{3}{4|x+2|} = 6$

Solution = $\left\{-\frac{15}{8}, -\frac{17}{8}\right\}$

Solution = $\{-7, 3\}$

Solution = $\{-14, -10\}$

16) $3\left|x - \frac{1}{5}\right| = \frac{6}{5}$

Solution = $\left\{-\frac{1}{5}, \frac{3}{5}\right\}$

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

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

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

Solution = $\left\{-\frac{15}{2}, -\frac{9}{2}\right\}$