

Name: _____

Score: _____

Solve the Absolute Value Equation
--

T3MS1

Solve each equation.

1) $4 2x - 5 = 8$	2) $3 -x + 1 = 6$	3) $\left \frac{x}{4} - 3\right = \frac{1}{2}$
Solution =	Solution =	Solution =
4) $ 3 - x = 5$	5) $\frac{7}{2} -x + 4 = \frac{1}{2}$	6) $5\left x + \frac{1}{3}\right = 2$
Solution =	Solution =	Solution =
7) $\frac{5}{3} 2 - x = 4$	<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%; text-align: center; font-size: 0.9em;"> <p>Members, please log in to download this worksheet.</p> </div> <div style="background-color: #0070C0; color: white; padding: 10px; width: 40%; text-align: center; font-size: 0.9em;"> <p>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) $2 7x - 1 =$		
Solution =		
13) $\frac{3}{2 x+5 } = 1$		
Solution =	Solution =	Solution =
16) $2\left x - \frac{1}{4}\right = \frac{2}{3}$	17) $ -3x + 4 = 1$	18) $3\left \frac{x}{2} + 1\right = 2$
Solution =	Solution =	Solution =

Name: _____

Answer key

Score: _____

Solve the Absolute Value Equation

T3MS1

1) $4|2x - 5| = 8$

Solution = $\left\{\frac{3}{2}, \frac{7}{2}\right\}$

2) $3|-x + 1| = 6$

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

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

Solution = $\{10, 14\}$

4) $|3 - x| = 5$

Solution = $\{-2, 8\}$

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

Solution = $\left\{-\frac{11}{15}, \frac{1}{15}\right\}$

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

Solution = $\left\{-\frac{11}{15}, \frac{1}{15}\right\}$

7) $\frac{5}{3}|2 - x| = 4$

Solution = $\left\{-\frac{2}{5}, \frac{14}{5}\right\}$

PREVIEW

Gain complete access to the largest collection of worksheets in all subjects!

Members, please log in to download this worksheet.

Not a member? Please sign up to gain complete access.

www.mathworksheets4kids.com

10) $2|7x - 1| = 4$

Solution = $\left\{-\frac{3}{14}, \frac{1}{14}\right\}$

$|x + 4| = 3$

Solution = $\{1, 7\}$

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

Solution = $\left\{-\frac{7}{2}, -\frac{13}{2}\right\}$

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

Solution = $\left\{-\frac{44}{3}, \frac{40}{3}\right\}$

11) $2\left|x - \frac{1}{4}\right| = \frac{2}{3}$

Solution = $\left\{-\frac{1}{12}, \frac{7}{12}\right\}$

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

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

18) $3\left|\frac{x}{2} + 1\right| = 2$

Solution = $\left\{-\frac{10}{3}, -\frac{2}{3}\right\}$