

Name _____

Date _____

Advanced Algebra

Unit 2: Family of Functions

I can solve an absolute Value Equation Assignment #18

Example: Solve $3|x + 2| + 1 = 13$

$3|x + 2| = 12$ Subtract

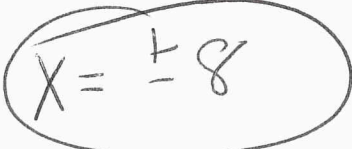
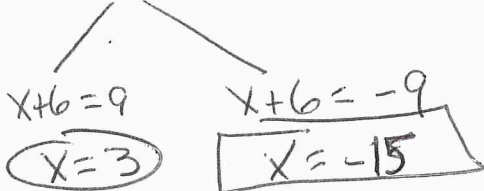
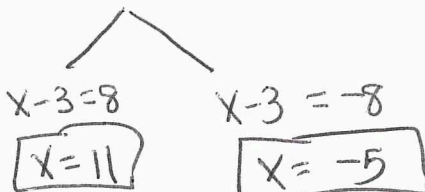
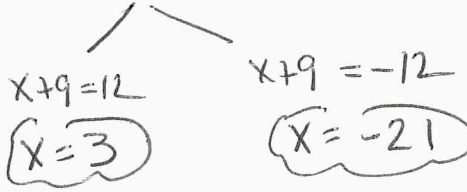
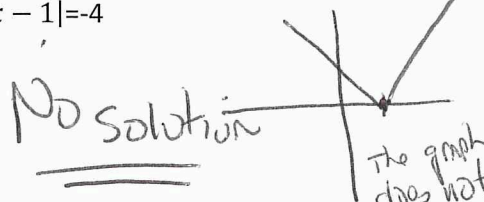
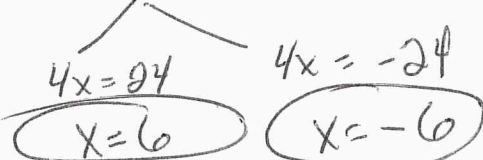
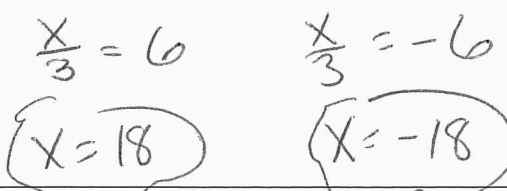
$|x + 2| = 4$ Divide

$x + 2 = 4$ or $x + 2 = -4$ Definition of absolute value

$x = 2$ or $x = -6$

The answer is $x = 2$ or $x = -6$

Solve the following. If there is no solution, write "no solution"

1) $ x = 8$ 	2) $ x + 6 = 9$ 
3) $ x - 3 = 8$ 	4) $ x + 9 = 12$ 
5) $ x - 1 = -4$ 	6) $ 4x = 24$ 
7) $ \frac{x}{3} = 6$ 	8) $ 2x + 1 = 25$ 