

## Equations containing Absolute Value

### Algorithm

1. Isolate the absolute value
2. Set the expression and the opposite of that expression on the inside of the absolute value signs equal to the number of the outside
3. Solve the resulting two equations

Solve the following equations.

1.  $|x| = 7$
2.  $|x-1| = 8$
3.  $|2x + 1| = 13$
4.  $|x-2| + 4 = 10$
5.  $|2x-3| = 13$
6.  $|3(x-2)| = 12$
7.  $|-4x| = 10$
8.  $|3x - 1| = 5x + 15$
9.  $|2x - 6| = 0$
10.  $|5(2x + 3)| = -9$