

# Ex 1: $|x - 1| = 4$

Rearrange the equation so that the absolute value bars are one side and everything else is on the other side.

Rewrite the equation by removing the absolute value bars and adding a plus or minus sign to the other side.

Determine your two new equations to be solved.

**Equation #1**

**Equation #2**

Solve each equation separately using inverse operations.

**Solve Equation #1**

**Solve Equation #2**

Substitute each solution into the original equation to check for extraneous solutions.

**Check First Solution**

**Check Second Solution**

Graph the solutions on a number line.



# Ex 2: $|-3 - x| = 2$

Rearrange the equation so that the absolute value bars are one side and everything else is on the other side.

Rewrite the equation by removing the absolute value bars and adding a plus or minus sign to the other side.

Determine your two new equations to be solved.

**Equation #1**

**Equation #2**

Solve each equation separately using inverse operations.

**Solve Equation #1**

**Solve Equation #2**

Substitute each solution into the original equation to check for extraneous solutions.


**Check First Solution**

**Check Second Solution**


Graph the solutions on a number line.




### Ex 3: $-4 + |-2x| = 16$

Rearrange the equation so that the absolute value bars are one side and everything else is on the other side.	
Rewrite the equation by removing the absolute value bars and adding a plus or minus sign to the other side.	
Determine your two new equations to be solved.	
<b>Equation #1</b>	<b>Equation #2</b>
Solve each equation separately using inverse operations.	
<b>Solve Equation #1</b>	<b>Solve Equation #2</b>
Substitute each solution into the original equation to check for extraneous solutions.	
<b>Check First Solution</b>	<b>Check Second Solution</b>
Graph the solutions on a number line.	
	

### Ex 4: $-|-4 + 2x| - 8 = -16$

Rearrange the equation so that the absolute value bars are one side and everything else is on the other side.	
Rewrite the equation by removing the absolute value bars and adding a plus or minus sign to the other side.	
Determine your two new equations to be solved.	
<b>Equation #1</b>	<b>Equation #2</b>
Solve each equation separately using inverse operations.	
<b>Solve Equation #1</b>	<b>Solve Equation #2</b>
Substitute each solution into the original equation to check for extraneous solutions.	
<b>Check First Solution</b>	<b>Check Second Solution</b>
Graph the solutions on a number line.	
	

**Ex 5:  $5 + |-2x + 10| = 5$**

Rearrange the equation so that the absolute value bars are one side and everything else is on the other side.	
Rewrite the equation by removing the absolute value bars and adding a plus or minus sign to the other side.	
Determine your two new equations to be solved.	
<b>Equation #1</b>	<b>Equation #2</b>
Solve each equation separately using inverse operations.	
<b>Solve Equation #1</b>	<b>Solve Equation #2</b>
Substitute each solution into the original equation to check for extraneous solutions.	
<b>Check First Solution</b>	<b>Check Second Solution</b>
Graph the solutions on a number line. 	

**Ex 6:  $-8|3 - 8x| = 40$**

Rearrange the equation so that the absolute value bars are one side and everything else is on the other side.	
Rewrite the equation by removing the absolute value bars and adding a plus or minus sign to the other side.	
Determine your two new equations to be solved.	
<b>Equation #1</b>	<b>Equation #2</b>
Solve each equation separately using inverse operations.	
<b>Solve Equation #1</b>	<b>Solve Equation #2</b>
Substitute each solution into the original equation to check for extraneous solutions.	
<b>Check First Solution</b>	<b>Check Second Solution</b>
Graph the solutions on a number line. 