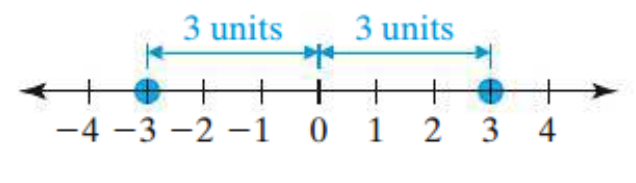
Section 4.3 Absolute Value Equations

# Objective 1: Solving Absolute Value Equations

The **absolute value of a number** is its distance from on the number line. In this section, we will concentrate on solving equations containing the absolute value of a linear expression.

The equation is an example of an absolute value equation. Its solution set will contain all numbers that are a distance of units from on the number line. There are two such numbers, and .



Thus, the solution set of the equation is .

**Solving Equations of the form**

If is a positive number, then is equivalent to or .

Find the solution set of the equation.

|  |  |
| --- | --- |
| a. | b. |
| c. | d. |

To apply the absolute value rule, first make sure that the absolute value expression is isolated.

Find the solution set of the equation.

|  |  |
| --- | --- |
| e. | f. |
| g. | h. |