

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## 1.4 Solving Absolute Value Equations

Essential Question: \_\_\_\_\_

*Exploration: There is no exploration for this lesson.*

The absolute value of a number is the \_\_\_\_\_ a number is from \_\_\_\_\_.

Examples:

### **EXAMPLE 1** Solving Absolute Value Equations

Solve each equation. Graph the solutions, if possible.

a.  $|x - 4| = 6$

b.  $|3x + 1| = -5$

### **EXAMPLE 2** Solving an Absolute Value Equation

Solve  $|3x + 9| - 10 = -4$ .

Solve the equation. Check your solutions.

4.  $|x - 2| + 5 = 9$

5.  $4|2x + 7| = 16$

6.  $-2|5x - 1| - 3 = -11$