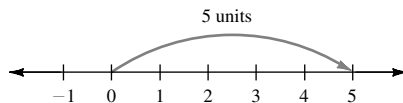


# 5.1

## Absolute Value of a Negative Integer

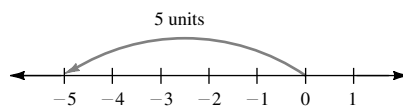
### • Example 1

(a) The absolute value of 5 is the distance on the number line between 0 and 5.



The absolute value of 5 is 5. 5 is 5 units from 0.

(b) The absolute value of  $-5$  is the distance on the number line between 0 and  $-5$ .



The absolute value of  $-5$  is 5.  $-5$  is also 5 units from 0.

We usually write the absolute value of a number by placing vertical bars before and after the number. For this Example we can write

$|5|$  is read "the absolute value of 5."

$$|5| = 5 \quad \text{and} \quad |-5| = 5$$

### • • • CHECK YOURSELF 1

Complete the following statements.

- The absolute value of 9 is \_\_\_\_\_.
- The absolute value of  $-12$  is \_\_\_\_\_.
- $|-6| =$  \_\_\_\_\_
- $|15| =$  \_\_\_\_\_

### • • • CHECK YOURSELF ANSWER

- (a) 9; (b) 12; (c) 6; (d) 15.

# 5.1 Exercises

Name \_\_\_\_\_

Section \_\_\_\_\_

Date \_\_\_\_\_

## A N S W E R S

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_

Indicate whether the following statements are true or false.

1.  $|-6| = -6$
2. The absolute value of  $-9$  is  $-9$ .
3.  $|-20| = 20$
4. The absolute value of  $-3$  is  $3$ .
5.  $|-9| = -9$
6. The absolute value of  $-5$  is  $5$ .
7. The absolute value of  $-18$  is  $-18$ .
8.  $|-8| = 8$

Complete the following statements.

9.  $|-20| = \underline{\hspace{1cm}}$ .
10. The absolute value of  $-12$  is  $\underline{\hspace{1cm}}$ .
11.  $|-15| = \underline{\hspace{1cm}}$ .
12. The absolute value of  $-10$  is  $\underline{\hspace{1cm}}$ .
13. The absolute value of  $-12$  is  $\underline{\hspace{1cm}}$ .
14.  $|-15| = \underline{\hspace{1cm}}$ .