



Name \_\_\_\_\_ Date \_\_\_\_\_

# Comparing and Ordering Integers

(pages 437–439)

You can use a number line to compare numbers.

## Comparing Numbers

- On a number line, the number to the left is always less than the number to the right.
- Recall that  $7 > 3$  means 7 is greater than 3.  
 $-7 < 3$  means that  $-7$  is less than 3.
- To order integers, first graph them on a number line. Then write them in order from left to right, or least to greatest.

## EXAMPLES

**A** Which is greater, 13 or  $-17$ ?

*The integer  $-17$  is farther from zero than 13, but, because it is a negative integer, it is less than any positive integer. Think, "It is better to have \$13 than to have a debt of \$17."*

$$13 > -17$$

**B** Which is greater,  $-7$  or  $-3$ ?

*Think of both of these on a number line. Which integer is to the left? A number to the left is always less than the number to the right.*

$$-7 < -3 \text{ or } -3 > -7$$

## Try These Together

1. Order from least to greatest:

$$2, -2, 5, -5, 0.$$

*HINT: Graph the points on a number line. Then write the integers in order from left to right (least to greatest).*

2. Order from greatest to least:

$$7, -6, 0, -5, 6.$$

*HINT: Graph the points on a number line. Then write in order from right to left (greatest to least).*

## PRACTICE

Replace each  $\bullet$  with  $<$ ,  $>$ , or  $=$  to make a true sentence.

3.  $-3 \bullet 5$

4.  $8 \bullet 2$

5.  $4 \bullet -1$

6.  $-9 \bullet -9$

7.  $-7 \bullet -12$

8.  $10 \bullet 15$

9.  $21 \bullet -2$

10.  $-35 \bullet 5$

11.  $-6 \bullet 3$

12.  $5 \bullet -4$

13.  $18 \bullet 21$

14.  $-47 \bullet -47$

15. Which is greatest,  $-10$ ,  $10$ , or  $0$ ?

16. Order  $-5$ ,  $6$ ,  $-9$ , and  $-1$  from least to greatest.

17. Order  $2$ ,  $-3$ , and  $-1$  from greatest to least.

18. Is negative one greater than, less than, or equal to positive one?

19. **Games** Luis and Vilma were playing a game with negative and positive numbers on a number cube to show how many squares to move. Luis rolled a  $+4$  and Vilma rolled a  $-2$ . Who moved farther forward on the game board?



20. **Standardized Test Practice** Which is least,  $-5$ ,  $16$ ,  $-13$ , or  $-27$ ?

**A** 16

**B**  $-5$

**C**  $-13$

**D**  $-27$

Answers: 1.  $-5$ ,  $-2$ ,  $0$ ,  $2$ ,  $5$  2.  $7$ ,  $6$ ,  $0$ ,  $-5$ ,  $-6$  3.  $<$  4.  $<$  5.  $<$  6.  $=$  7.  $<$  8.  $<$  9.  $<$  10.  $<$  11.  $<$  12.  $<$  13.  $<$  14.  $=$  15.  $10$  16.  $-9$ ,  $-5$ ,  $-1$ ,  $6$  17.  $2$ ,  $-1$ ,  $-3$  18. less than 19. Luis 20. D