

Comparing and Ordering Integers

(pages 188–190)

You can use a number line to order integers.

Ordering Integers

On a number line, a number to the left is less than a number to the right.

EXAMPLES**A** Which is greater, -4 or 2 ?*On a number line, -4 is to the left of 2 , so $-4 < 2$ or $2 > -4$.***B** Order these integers from least to greatest. $3, 0, -5, -1, 2, -3, -6$ *Think of these numbers on a number line in order from left (least) to right (greatest).* $-6, -5, -3, -1, 0, 2, 3$ **Try These Together****Replace each ● with $<$ or $>$ to make a true sentence.**

1. $-12 \bullet -6$

HINT: Which integer is to the left on a number line?

2. $8 \bullet -9$.

*HINT: A positive integer is always greater than a negative integer.***PRACTICE****Replace each ● with $<$ or $>$ to make a true sentence.**

3. $-5 \bullet -6$

4. $15 \bullet -2$

5. $17 \bullet -18$

6. $25 \bullet 28$

7. $-16 \bullet -28$

8. $-2 \bullet -8$

9. $-19 \bullet 19$

10. $30 \bullet 26$

11. $-19 \bullet 21$

12. $-45 \bullet -43$

Order the integers from least to greatest.

13. $8, -3, 6, -4, 5$

14. $17, 12, -14, -6, 5, -3, -2$

15. Which is greater, 8 or -8 ?16. **Weather** The high temperatures for one week in Minneapolis, Minnesota, were $0^\circ, -5^\circ, -2^\circ, 3^\circ, 8^\circ, 10^\circ$, and -16° Fahrenheit. Order the temperatures from least to greatest.17. **Standardized Test Practice** Order the integers, $-7, 8, -11$, and 14 from greatest to least.

A $14, 8, -7, -11$

B $-7, 8, -11, 14$

C $-11, -7, 8, 14$

D $-7, -11, 8, 14$

Answers: 1. $<$ 2. $<$ 3. $<$ 4. $<$ 5. $>$ 6. $<$ 7. $>$ 8. $>$ 9. $>$ 10. $>$ 11. $<$ 12. $<$ 13. $-4, -3, 5, 6, 8$
14. $-14, -6, -3, -2, 5, 12, 17$ 15. 8 16. $-16^\circ, -5^\circ, -2^\circ, 3^\circ, 8^\circ, 10^\circ$ 17. **A**