REVIEW: Comparing, Ordering, and Graphing Integers

Name _____

Key Concept and Vocabulary

zero

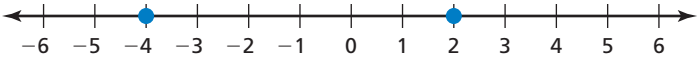
. . . , −3, −2, −1, 0, 1, 2, 3, . . .

negative integers

positive integers

Visual Model

Number Line



$-4 < 2$ because -4 is to the left of 2 on the number line.

Skill Examples

1. $0 \leq 4$ "0 is less than or equal to 4"
2. $-1 > -3$ "-1 is greater than -3"
3. $-2 < -1$ "-2 is less than -1"
4. $2 > -2$ "2 is greater than -2"
5. $3 \geq 2$ "3 is greater than or equal to 2"

Application Example

6. The temperature in Seattle is 4°F. The temperature in Denver is −6°F. Which temperature is greater?

$-6 < 4$ "-6 is less than 4"

∴ The temperature is greater in Seattle.

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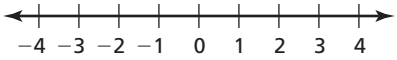
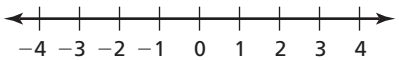
Check your answers at BigIdeasMath.com.

Graph the two numbers. Then compare them using < or >.

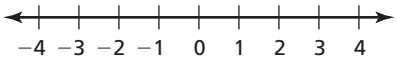
7. $-3 \square 2$



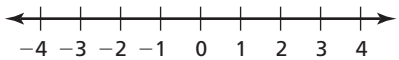
8. $-1 \square 0$



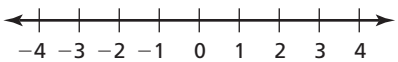
9. $-1 \square -4$



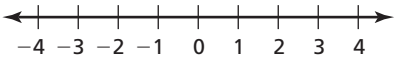
10. $1 \square 3$



11. $0 \square 2$



12. $3 \square -1$



Order the temperatures from least to greatest.

13. −5°F, 13°F, 0°F, 5°F, 2°F, 20°F

_____

14. 7°C, −4°C, −11°C, 0°C, 8°C, −12°C

_____

Use an integer to describe the real-life situation.

15. A *profit* of $5 _____
    A *loss* of $5 _____
16. A *depth* of 8 ft _____
    A *height* of 4 ft _____
17. A *decrease* of 5°F _____
    An *increase* of 8°F _____

18. **BUSINESS LOSS** During its first week, a business had a loss that was greater than $4, but less than $6. Circle each integer that could represent this loss.

−$7, −$6, −$5, −$4, −$3, −$2, −$1, $0, $1, $2, $3, $4, $5, $6, $7