Lesson 1 Reteach

Integers and Graphing

An _______ is a number from the set \{…, −4, −3, −2, −1, 0, 1, 2, 3, 4, …\}.
Integers greater than 0 are _______________________________.
Integers less than 0 are _____________________________ and use the negative sign (−)

Example 1
Write an integer for each situation.

a. 16 feet under the ground

b. a gain of 5 hours

To graph an integer on a number line, draw a point on the number line at its location. A set of integers is written using braces such as \{−5, −2, 3\}.

Example 2
Graph the set of integers \{−5, −2, 3\} on a number line.

c
Draw a number line. Draw a dot at the location of −5, of −2, and of 3.

Example 3:
Graph −4, 1, 7
Exercises
Write an integer for each situation.

1. a profit of $60
2. a decrease of 10

3. a loss of 3 yards
4. a gain of 12 ounces

5. Graph the set \{−6, 5, −4\} on a number line.

6. Graph the set \{−5, 1, −3\} on a number line.
Lesson 1 Homework Practice

Integers and Graphing

Write an integer for each situation. Explain the meaning of zero in each situation.

1. a drop of 200 feet
2. an expansion of 3 cubic meters
3. earn 10 points
4. reduce by 8 inches
5. gain 2 pounds
6. a drop of 7 degrees

Graph each set of integers on a number line.

7. \{-4, -3, 1, 5\}

8. \{-15, -12, -9, -2\}

9. \{8, 3, -7, -5\}

10. \{-14, -7, 10, -1\}

11. TEMPERATURES The low temperatures for three consecutive days were \(-5^\circ F, 3^\circ F,\) and \(4^\circ F\). Graph this set of integers on a number line.

\[\begin{array}{c}
\text{\{-4, -3, 1, 5\}} \\
\text{\{-15, -12, -9, -2\}} \\
\text{\{8, 3, -7, -5\}} \\
\text{\{-14, -7, 10, -1\}} \\
\end{array}\]
Lesson 1

Integers and Graphing

An integer is a number from the set \{…, −4, −3, −2, −1, 0, 1, 2, 3, 4, …\}.

Integers greater than 0 are positive integers.

Integers less than 0 are negative integers and use the negative sign (−).

Example 1

Write an integer for each situation.

a. 16 feet under the ground
   Because it is under the ground, the integer is −16.

b. a gain of 5 hours
   Because it is a gain, the integer is 5.

To graph an integer on a number line draw a point on the number line at its location. A set of integers is written using braces such as \{−5, −2, 3\}.

Example 2

Graph the set of integers \{−5, −2, 3\} on a number line.

Draw a number line. Draw a dot at the location of −5, of −2, and of 3.

Exercises

Write an integer for each situation.

1. a profit of $60
2. a decrease of 10°
3. a loss of 3 yards
4. a gain of 12 ounces
5. Graph the set \{−6, 5, −4\} on a number line.
6. Graph the set \{-5, 1, -3\} on a number line.