

INTEGERS ON THE NUMBER LINE

INTEGERS

- The set of whole numbers and their _____ are called integers.
- Examples: _____

THE NUMBER LINE

- Integers can be plotted on a number line where the positive values are located to the _____ of zero and the negative values are located to the _____ of zero.

Use the open number line below to determine the location of each point. Label the number line and your plotted points.

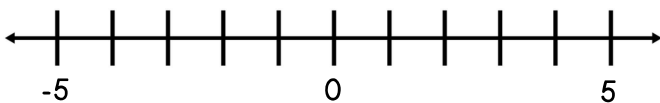
A: -8 B: 5 C: -2 D: 0 E: 9



- Which point in the set above has the largest value? Justify your thinking.
- Which point in the set above has the smallest value? Justify your thinking.

Use your understanding of integers to answer the questions below.

1. Georgie is asked to plot the number -3 on the number line below. Where should Georgie plot the number?



2. The following transactions are shown on a bank statement. List the transactions from least to greatest. Use a number line to help.

\$12, -\$5, \$8, \$3, -\$11

Write the symbol and an example for each of the following:

GREATER THAN

LESS THAN

EQUAL TO

Use your understanding of comparing integers to answer the questions below.

<p>3. Use the symbols $<$, $>$, or $=$ to make each statement true for questions a-d.</p> <p>a. -19 _____ 20</p> <p>b. 8 _____ -8</p> <p>c. 0 _____ -7</p> <p>d. -13 _____ -12</p>	<p>4. Three students compared integers. Determine which student completed the task correctly.</p> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>TY</p> <p>$-6 > -5$</p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>NICO</p> <p>$3 > -4$</p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>PAUL</p> <p>$0 < -1$</p> </div> </div>														
<p>5. Beatrice places four different points on a number line. What value best represents point B?</p> <div style="text-align: center; margin-top: 10px;"> </div>	<p>6. The table below represents the number of yards gained in six different plays. List the values in order from greatest to least.</p> <table border="1" style="margin: 10px auto; border-collapse: collapse; text-align: center;"> <tr> <th style="padding: 5px;">PLAY</th> <td style="padding: 5px;">1</td> <td style="padding: 5px;">2</td> <td style="padding: 5px;">3</td> <td style="padding: 5px;">4</td> <td style="padding: 5px;">5</td> <td style="padding: 5px;">6</td> </tr> <tr> <th style="padding: 5px;">YARDS</th> <td style="padding: 5px;">-8</td> <td style="padding: 5px;">2</td> <td style="padding: 5px;">6</td> <td style="padding: 5px;">14</td> <td style="padding: 5px;">-5</td> <td style="padding: 5px;">-9</td> </tr> </table>	PLAY	1	2	3	4	5	6	YARDS	-8	2	6	14	-5	-9
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Brainstorm real-world terms and phrases that indicate a positive or negative integer.

NEGATIVE	EQUAL	POSITIVE

7. Several clues are given to describe various integers. Write an integer that best represents each clue.

<p>A A football player caught a 57-yard pass _____</p>	<p>B The temperature dropped 15° overnight. _____</p>	<p>C Your account is credited \$14.00. _____</p>	<p>D A submarine travels at 550 feet below sea level. _____</p>
<p>E Carbon has 6 protons. _____</p>	<p>F Las Vegas, NV has an average temperature of 101° above zero. _____</p>	<p>G A bank account is overdrawn \$27.00. _____</p>	<p>H A quarterback is sacked for a loss of 5 yards. _____</p>

Summarize today's lesson: