Comparing and Ordering Integers

The integers are the positive and <u>negative</u> whole numbers... -4, -3, -2, -1, 0, 1, 2,.... The name "integer" comes directly from the Latin word for "whole."

The **integers** are the numbers ..., ⁻3, ⁻2, ⁻1, 0, 1, 2, 3 ... (the dots indicate that the numbers continue without end in both the positive and negative directions). **Negative integers** are integers that are less than 0. **Positive integers** are integers that are greater than 0.

Zero is neither negative nor positive.
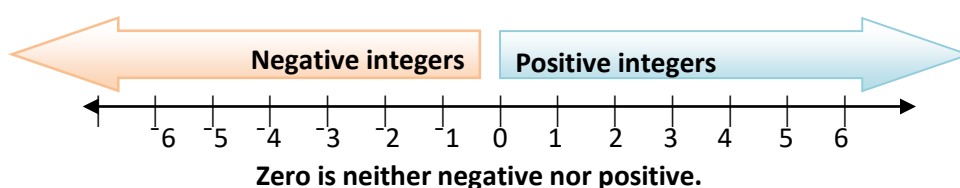
Example 1: Determine which integer is the lowest:
                    ⁻70, ⁻54, ⁻35, ⁻19, ⁻9

Graph the integers on a number line.
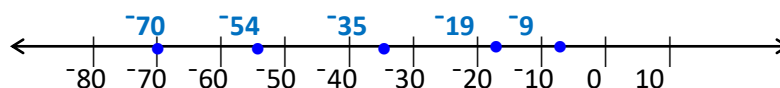
Read the numbers from left to right: ⁻70, ⁻54, ⁻35, ⁻19, ⁻9.

⁻70°C is the lowest number

Absolute value: The absolute value of a number is its distance from 0 on a number line. The absolute value of a number a is written as │a│. You can use a number line to find the absolute value of a number.

Opposite: Two numbers are **opposites** if they have the same absolute value but different signs.

For example, ⁻10 and 10 are opposites. The expression ⁻10 can be read as "the opposite of 10." or as "negative of 10" or as "negative 10." The expression "⁻a" is read as "the opposite of *a*."