What are Integers?

The word integer originated from the Latin word “Integer” which means whole or intact. Integers is a special set of numbers comprising zero, positive numbers and negative numbers.

Examples of Integers: – 1, -12, 6, 15.

Symbol

The integers are represented by the symbol ‘**Z’.**

Z= {……-8,-7,-6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, 7, 8,……}

Types of Integers

Integers come in three types:

- Zero (0)
- Positive Integers (Natural numbers)
- Negative Integers (Additive inverse of Natural Numbers)

Zero

Zero is neither a positive nor a negative integer. It is a neutral number i.e. zero has no sign (+ or -).

Positive Integers

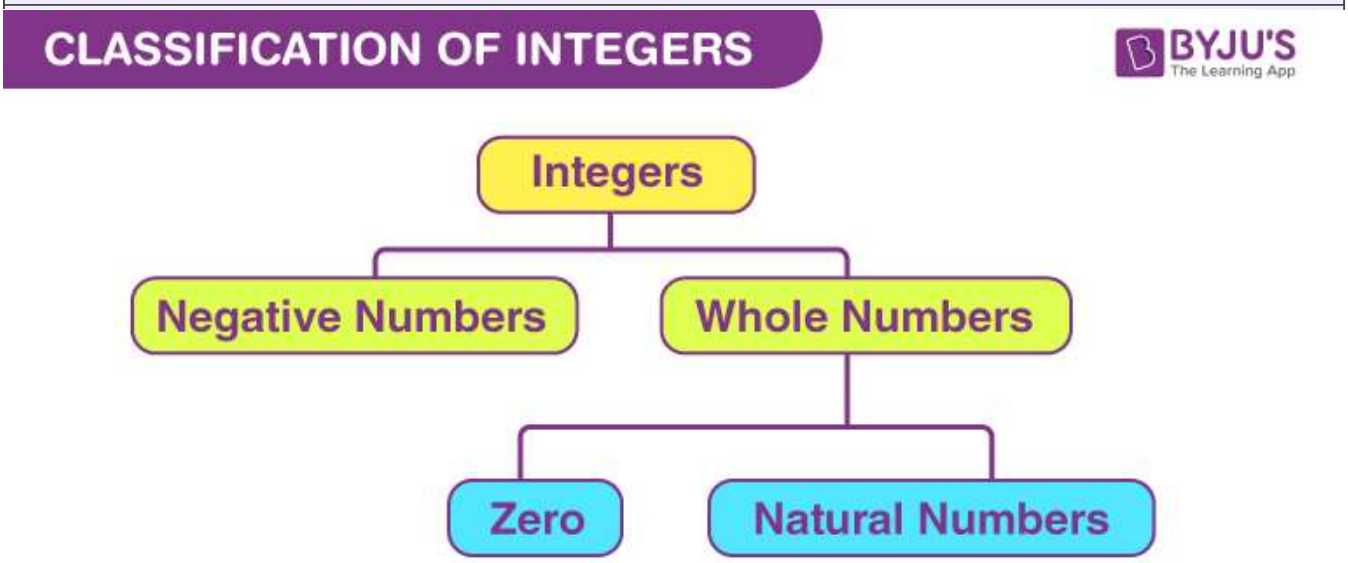
The positive integers are the natural numbers or also called counting numbers. These integers are also sometimes denoted by Z+. The positive integers lie on the right side of 0 on a number line.

Z+ → 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30,....

Negative Integers

The negative integers are the negative of natural numbers. They are denoted by Z–. The negative integers lie on the left side of 0 on a number line.

Z– → -1, -2, -3, -4, -5, -6, -7, -8, -9, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24, -25, -26, -27, -28, -29, -30,.....



How to Represent Integers on Number Line?

As we have already discussed the three categories of integers, we can easily represent them on a number line based on positive integers, negative integers and zero.

Zero is the centre of integers on a number line. Positive integers lie on the right side of zero and negative integers lie on the left. See the below figure.

INTEGER NUMBER LINE