Lesson 13 – Positive and Negative Integers

Integers are used to express many things in our daily lives:

Examples:

- Temperature
- Elevations
- Golf scores
- Profits
- Losses
- Financial statements

- A profit of $700 can be written as +700 whereas a loss of $700 can be written as -700
- When a golfer shoots 4 under par, his score is written as -4
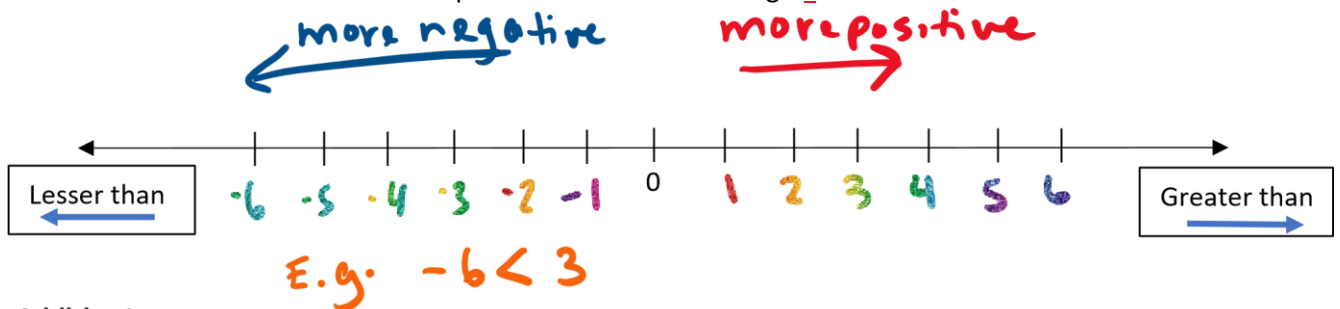
I = symbol for integers

- Composed of ALL __positive__ **numbers** and __negative__ **numbers**
- Includes the number **zero** which is considered **neutral** (neither positive nor negative)

Set of integers is

$$I\{\dots\ -4, -3, -2, 1, 0, +1, +2, +3, +4, \dots\}$$

+8 is read as __positive eight__ and **-5** is read as __negative five__.

A set of integers can be represented graphically to help us determine whether one integer is larger than another. We can also use a number line to help us add and subtract integers.

e.g. $-6 < 3$

Additive Inverses:

- Every integer has an opposite integer

Example:

+4 → -4   -3 → +3

-8 → +8   +2 → -2