

## Lesson 47: Integers

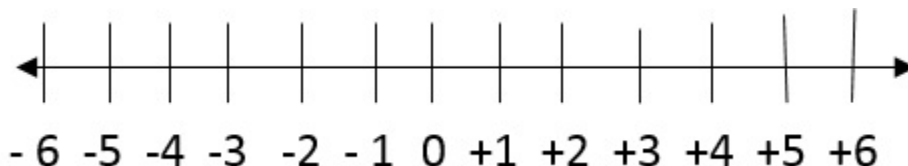
**Purpose of lesson:** You will learn about integers.

**Words to Learn:** Integers are whole numbers (not a fractional part) that are **positive (+)** or **negative (-)**, including zero. A **signed number** is a number preceded by a plus sign (+) to indicate a positive quantity or by a minus sign (-) to indicate a negative quantity.



**Note:** Below is a number line displaying positive (+) and negative (-) numbers and zero.

**Examples:** +4, -3, -1, +10, 22 etc. are integers.



**Some things to know about integers:**

- 1) **Zero(0)** is an integer even though it does not have a positive or negative sign.
- 2) Fractions are **not** integers.
- 3) Decimals are **not** integers.
- 4) If you do not see a sign in front of a number it is **positive**.  
4 or **+4** are equal.

Determine which are and which are not integers:

**Take Lesson 47 Quiz 1**



So, when do we use integers?

Some examples of when we might use integers are with positive(+) or negative(-) signs:



- 1) When the temperature goes below 0 degrees ( $0^{\circ}$ ), use a negative integer (example:  $-4^{\circ}$ ).
- 2) Show a loss or gain of money with plus(+) or negative(-) before the dollar amount (example: loss =  $-\$20$  or gain =  $+\$20$ ).

Can you think of any reasons to use a sign before a number?