Lesson 13- Using & Comparing Integers

Integers are used to express opposite ideas.

Natural numbers (1, 2, 3, 4, 5 ...∞...) positive whole numbers (not zero)
Whole numbers (0, 1, 2, 3, 4 ...∞...) including zero

Integers (...⁻∞... −3, −2, −1, 0, 1, 2, 3 ...∞...) positive and negative whole numbers

WORDS YOU MUST KNOW FOR WORD PROBLEMS

A gain of 5 points = +5   a profit of $20 = +20
A loss of 5 points = −5   a debt of $20 = −20

10 steps up = +10   a deposit of $100 = +100
10 steps down = −10   a withdrawal of $ 100 = −100

20 meters left = −20   5 meters above sea level = +5
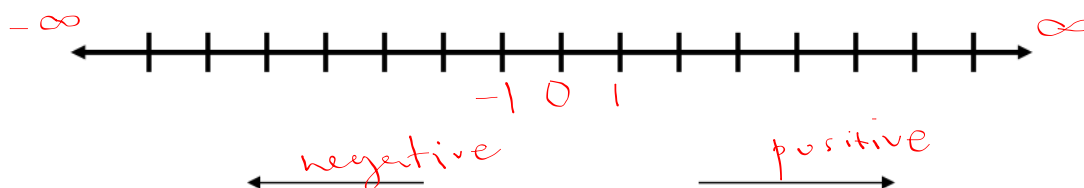20 meters right = +20   5 meters below sea level = −5

Comparing Integers: Use an *integer number line.*

Two positive integers: bigger numbers = __greater__ value

Two negative integers: numbers closer to 0 are __greater__

A positive and negative integer:
    Different signs, than the __larger unit__ number is always Bigger

−∞ ←——————————————————————→ ∞

−1 0 1

negative   positive

Examples:
    1. Opposite of   +7 = −7

                          −2 = +2

                            0 = 0