ST. LAWRENCE HIGH SCHOOL<br>A Jesuit Christian Minority Institution<br>STUDY MATERIAL<br>CLASS -VI

Subject - Arithmetic - First Term
CHAPTER 3 - NEGATIVE NUMBERS - Comparison \& Absolute Value

Negative numbers are numbers that are less than zero.
Negative numbers are indicated by placing a dash ( - ) sign in front, such as $-5,-12.77$. A negative number such as -6 is spoken as 'negative six'.

An integer is a number that has no fractional part, and no digits after the decimal point. An integer can be positive, negative or zero. (Compare this to real numbers than can have digits after the point and can have fractional parts)

Example integers: 12, 34, -4, 0
Comparison of Negative Numbers: Examples
Which number in each of the following pairs is smaller?
(i) $0,-4$
(ii) $-3,12$

Solution:
(i) 0 is greater than the negative integers

So we get - $4<0$
Therefore, -4 is smaller.
(ii) 12 is greater than -3 on a number line

So we get
$-3<12$
Therefore, -3 is smaller.
Some more problems related to this :
a)Write the integers between -7 to 3

Sol : The integers between - 7 and 3 are
$-6,-5,-4,-3,-2,-1,0,1,2$
b) Write the integers between - 2 t0 2

Sol : The integers between -2 and 2 are
$-1,0,1$.
c)Write the following integers in decreasing order: $-15,0,-2,-9,7,6,-5,8$

Solution: $-15,0,-2,-9,7,6,-5,8$ can be written in decreasing order as
8, 7, 6, 0, -2, -5, -9, -15
Absolute value : The absolute value of the integer is the numerical value of the integer, without regard to whether the sign is negative or positive on the number line.

For example :
The absolute value of $|-5|$ is
$|-5|=5$
(xii) The absolute value of $|12-5|$ is
$|12-5|=7$.

