Welland Gouldsmith School,

Class VII
Subject :- Mathematics
Chapter :- Integers

Some facts about addition and subtraction of integers

1. When 2 positive integers are added we get a positive integer
   e.g. 33+43=76

2. When 2 negative integers are added we get a negative integer.
   e.g. -15 plus - 17 = - 32

3. When 1 positive and 1 negative integers are added we take the difference and place the sign of the bigger number.
   e.g.- 73+76 = 3 or 145 +(-207) = - 62

4. The additive inverse of a is – a and vice versa

ASSIGNMENT 1. Exercise no1.1.
Nos: 2, 3 ,4, 7.

Properties of addition of integers:

1. Commutative Property.
   e.g. a + b = b + a which means 6 + 4 = 4 + 6

2. Associative Property
   e.g.a+ (b + c) = (a + b) + c or 4 + (6 + 7) = (4 + 6) + 7

Properties of subtraction of integers:

1. If a and b are 2 integers then a – b and b – a are also integers
2. a – b is not equal to b – a which means 4 – 6 is not the same as 6 – 4
3. Associative property does not hold under subtraction
   e.g. a- (b – c) is not equal to (a – b) – c
   9 – (6 – 5) is not equal to (9 – 6) – 5

ASSIGNMENT 2. Exercise 1.2
Nos: 1, 2, 3, 4, 5, 6, 7,8,9.

Multiplication of integers.

1. Commutative Property
   a x b = b x a which means 3 x 4 = 4 x 3
2. Associative Property
   a x (b x c) =(a x b) x c which means 2 x (4 x 3) = (2 x 4) x3
3. Distributive Property
   a x (b + c) = a x b + a x c which means 2 x (4 + 3)= 2 x 4 + 2 x 3
4. The product of any integer and 0is 0

ASSIGNMENT 3. Exercise 1.3
Nos: 1, 2, 4, 6.

Properties of division of integers

1. Division of an integer by zero is not defined.
   e.g. 7/ 0 is not defined
2. 0 / 7 = 0
3. If a and b are 2 integers then a/b is not necessarily an integer.
   e.g. 34/2 = 17 which is an integer but 34 / 5 is not an integer.
4. a / b is not equal to b/ a
5. For any integer a. a/1 = a
   e.g. 8/ 1 = 8

ASSIGNMENT 4. Exercise 1.4
Nos : 1, 2, 3,4.