**Special Assignment -12**

**Subject- Mathematics**

**Class – Three**

Lesson 4- Multiplication

Learning Content

* The product of two or more numbers is called multiplication.
* Multiplication is simple form of repeated addition.

Example- 3 + 3+ 3+ 3 = 4 × 3 =12

* The number which is being multiplied is called the **multiplicand**.
* The number by which we multiply is called the **multiplier**.
* The answer obtained is called **product**.

Example - 25 × 5 = 125

 Multiplicand Multiplier Product

* The numbers that are being multiplied are called the **factors.**

Example - 8× 4 = 32

Here 8 and 4 are factors of 32.

Properties of Multiplication.

1.Any number multiplied by 0 , gives 0. E.g. 82 × 0 = 0.

2.Any number multiplied by 1, gives the same number. E.g. 522 × 1 = 522

3.Multiplying two numbers in any order, does not change the product.

 E.g. 12 × 10 = 120 , 10 × 12 = 120

4.Any number multiplied by 10, gives us a number with one zero on its right.

 E.g. – 21 × 10 =210

5.Multiplying a number by 100( or 1000) means putting two (or 3) zeros on its right.

 E.g. - 8 × 100 = 800 , 15 × 1000 = 15000

6.Multiplying a numbers by 20 , 30 or 90 means multiplying the numbers by 2 , 3 or 9 and putting one zero on its right.

 E.g. – 4 × 20 = 80 means 4 × 2 = 8 , then add one zero after 8 that is 80.

**Exercise**

I.Fill up.

(1)313 × ­­\_\_\_\_\_\_ = 0 , (2) 56 × \_\_\_\_ = 560 (3) 515 × \_\_\_\_\_ = 515

 (4) 34 × \_\_\_\_ = 10 × 34 (5) \_\_\_\_ × 100 = 900

Ans. (1) 0 (2) 10 (3) 1 (4) 10 (5) 9

II.Multiply on the number line.

4 × 5 =

Solution .

Ans .4 × 5 = 20

III.Multiply(3 digit number by 1 digit number) (With carry over)

1)115 by 8 2)229 by 9

Solution.

TH H T O TH H T O

 1 1 5 2 2 9

 × 8 × 9

 9 2 0 2 0 6 1

IV.Multiply (A 2 digit number by a two digit number) ( with carry over)

Multiply using short cut method.

1)34 × 36

Solution.

 TH H T O

 3 4

 × 3 6

 2 0 4

 + 1 0 2 ×

 1 2 2 4 Ans.

2) Multiply using expanded form of multiplier.

 77 × 23

Solution.

= 77 × (20 + 3)

=(77 × 20 ) + ( 77 × 3)

=1540 + 231

=1771 Ans.

V.Multiply.(A 3-digit number by a 2- digit number)

1)224 × 16 2) 256 × 23

Sol. TH H T O Sol. TH H T O

 2 2 4 2 5 6

 × 1 6 × 2 3

 1 3 4 4 7 6 8

 + 2 2 4 × + 5 1 2 ×

 3 5 8 4 Ans. 5 8 8 8 Ans.

**Note : Compete the exercises of Page no 58, 59, 61 and 62 in the textbook**.

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