



CLASS - II - MATHEMATICS NOTES JANUARY

Chapter 9 - MULTIPLICATION



4 Times 3 is $3 + 3 + 3 + 3 = 12$

Or $4 \times 3 = 12$, is a

Multiplication fact.

Here, \times is the symbol or sign of multiplication.

So, repeated addition of the same number is called multiplication.

PROPERTIES OF MULTIPLICATION:

1. Multiplication of any number with 1 is always the number itself.
2. Multiplying any number with 0 is always be zero.
3. Two numbers can be multiplied in any order, the product remains the same.

I. Fill in the blanks:

1. $8 \times 5 = \underline{5} \times 8$

2. $\underline{3} \times 6 = 6 \times 3$

3. $9 \times 3 = 3 \times \underline{9}$

4. $2 \times \underline{7} = 7 \times 2$

II. Vertical Multiplication (using multiplication tables):

| | | |
|----|----------|---|
| 1. | T | O |
| | | 4 |
| | \times | 3 |
| | <hr/> | |
| | 1 | 2 |
| | <hr/> | |

$$\begin{array}{r}
 2. \quad \text{T} \quad 0 \\
 \quad \quad 5 \\
 \times \quad 8 \\
 \hline
 4 \quad 0
 \end{array}$$

$$\begin{array}{r}
 3. \quad \text{T} \quad 0 \\
 \quad \quad 7 \\
 \times \quad 6 \\
 \hline
 4 \quad 2
 \end{array}$$

$$\begin{array}{r}
 4. \quad \text{T} \quad 0 \\
 \quad \quad 9 \\
 \times \quad 2 \\
 \hline
 1 \quad 8
 \end{array}$$

III. Multiplication of 2 - digit number by a 1 - digit number (without carrying):

$$\begin{array}{r}
 1. \quad \text{T} \quad 0 \\
 \quad 7 \quad 2 \\
 \times \quad 1 \\
 \hline
 7 \quad 2
 \end{array}$$

$$\begin{array}{r}
 2. \quad \text{T} \quad 0 \\
 \quad 4 \quad 1 \\
 \times \quad 1 \\
 \hline
 4 \quad 1
 \end{array}$$

$$\begin{array}{r}
 3. \quad \text{T} \quad 0 \\
 \quad 3 \quad 3 \\
 \times \quad 3 \\
 \hline
 9 \quad 9
 \end{array}$$

$$\begin{array}{r}
 4. \quad \begin{array}{r} \text{T} \end{array} \quad \begin{array}{r} 0 \\ 1 \\ \times \\ \hline 5 \end{array} \\
 \hline
 \end{array}$$

IV. Multiplication of a 2 digit number by a 1 - digit number (with carrying):

$$\begin{array}{r}
 1. \quad \begin{array}{r} \text{T} \\ \textcircled{2} \\ 1 \\ \times \\ \hline 7 \end{array} \quad \begin{array}{r} 0 \\ 5 \\ 5 \\ \hline 5 \end{array} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 2. \quad \begin{array}{r} \text{T} \\ \textcircled{1} \\ 2 \\ \times \\ \hline 9 \end{array} \quad \begin{array}{r} 0 \\ 4 \\ 4 \\ \hline 6 \end{array} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 3. \quad \begin{array}{r} \text{T} \\ \textcircled{1} \\ 2 \\ \times \\ \hline 5 \end{array} \quad \begin{array}{r} 0 \\ 8 \\ 2 \\ \hline 6 \end{array} \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 4. \quad \begin{array}{r} \text{T} \\ \textcircled{2} \\ 1 \\ \times \\ \hline 5 \end{array} \quad \begin{array}{r} 0 \\ 7 \\ 3 \\ \hline 1 \end{array} \\
 \hline
 \end{array}$$

V. Multiply the following:

1. H T O
 2
 5 7
 × 4
 —
 2 2 8

2. H T O
 9 0
 × 2
 —
 1 8 0

3. H T O
 1
 8 3
 × 5
 —
 4 1 5

4. H T O
 6
 9 9
 × 7
 —
 6 9 3

VI. Solve the following word problems:

1. There are 75 books in a box. Find the total number of books in 5 boxes.

OP: X

Number of books in a box =
 Number of boxes =
 Number of books in 5 boxes =

 H T O
 2
 7 5
 × 5
 —
 3 7 5

ANS: Total number of books in 5 boxes are 375

2. The cost of 1 ice - cream cone is 46 rupees. Find the cost of 5 ice - cream cones.

OP: X

Cost of 1 ice - cream cone = 46 rupees

Cost of 5 ice - cream cones = $46 \text{ rupees} \times 5$

| | | |
|---|---|----------|
| 2 | 3 | 0 rupees |
|---|---|----------|

ANS: Cost of 5 ice - cream cones is 230 rupees.

VII. Mind map:

