

STUDY COURSE MATERIAL

MATHEMATICS

SESSION-2020-21

CLASS-III

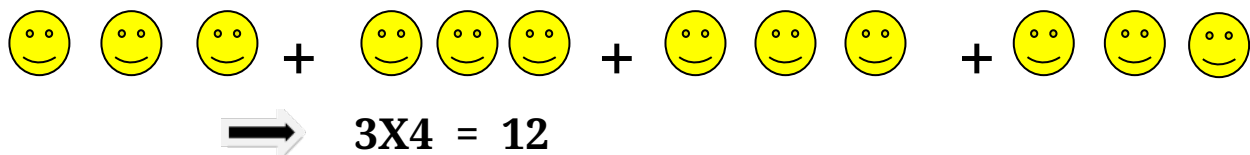
TOPIC: Ch- 4 Multiplication

DAY-1

❖ TEACHING MATERIAL

Multiplication

- Multiplication is another way of representing addition.
- Multiplication is also known as repeated addition.



➡ $3 \times 4 = 12$

Here,

$$3 \times 4 = 12$$

This no. tells us
how many are
there in each group

This no. tells us
the no. of groups
we have.

This no. is the
total or product

- **4 and 3 are factors and 12 is the product.**

❖ VIDEO-LINKS

<https://youtu.be/dPksJHBZs4Q>

DAY-2

❖ TEACHING MATERIAL

Multiplicand : The number to be multiplied is called the multiplicand.

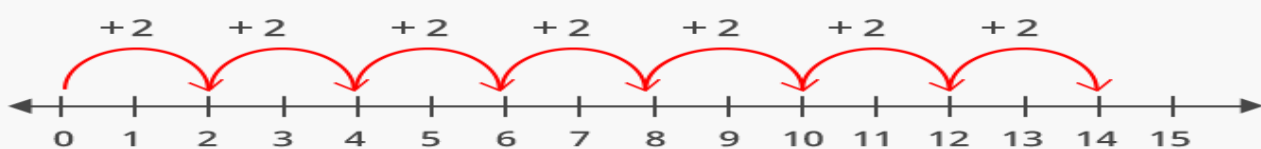
Multiplier : The number by which it is multiplied.

Product : The result of multiplication is called product.

$$\begin{array}{c} 7 \times 4 = 28 \longrightarrow \text{Product} \\ \downarrow \qquad \downarrow \\ \text{Multiplicand} \quad \text{Multiplier} \end{array}$$

Skip Counting

- Counting forward or backward by a number other than 1.
For example : Skip counting by 3 is : 3 , 6 , 9 , 12 , 15 , 18 ,
.....



Count by	Skip Counting					
2s						
	2	4	6	8	10	12

❖ VIDEO-LINKS

DAY-3

❖ TEACHING MATERIAL

Properties of Multiplication :

- **Order Property :**

a) When we multiply two numbers in any order , the product will always be the same.

Ex : $2 \times 3 = 6$ and $3 \times 2 = 6$

b) The order property works on 3 numbers also.

Ex : $2 \times 3 \times 4 = 24$ and $3 \times 2 \times 4 = 24$ and $4 \times 2 \times 3 = 24$

- **Multiplication by 0 and 1**

a) Any number multiplied by 0 is always 0.

Ex : $7 \times 0 = 0$, $9 \times 0 = 0$ etc

b) Any number multiplied by 1 is the number itself.

Ex : $17 \times 1 = 17$, $45 \times 1 = 45$ etc

❖ VIDEO-LINKS

https://youtu.be/xtnWAKYQ_ew

<https://youtu.be/wbVQbKGx8eY>

DAY-4

Multiplication by a 1- digit, 2 – digit , 3 – digit Number:

Ex : Multiply 825 by 5 .

Th H T O

	8	2	5
		X	5
			5
		2	0
4	1	0	0
4	1	2	5

Step 1 : Multiplying ones.

5 X 5 ones = 25 Ones = 2 tens and 5 Ones
Carry over 2 tens.

Step 2 : Multiplying tens .

5 X 2 tens = 10 tens + 2 tens = 12 tens = 1 hundred + 2 tens
Carry over 1 hundred.

Step 3 : Multiplying hundreds.

5 X 8 hundreds = 40 hundreds + 1 hundred
= 41 hundreds

H	T	O
	2	7
X	1	5
1	3	5
2	7	0
4	0	5

$$\begin{aligned}
 27 \times 15 &= 27 \times (10 + 5) \\
 &= 27 \times 10 + 27 \times 5 \\
 &= 270 + 135 \\
 &= 405
 \end{aligned}$$

So , $27 \times 15 = 405$

Th	H	T	O
	2	5	9
X		3	1
	2	5	9
7	7	7	0
8	0	2	9

$$\begin{aligned}
 259 \times 31 \\
 = 259 \times
 \end{aligned}$$

$(30 + 1)$

$$\begin{aligned}
 &= 259 \times 30 + 259 \times 1 \\
 &= 7770 + 259 \\
 &= 8029
 \end{aligned}$$

So, $259 \times 31 = 8029$

❖ VIDEO-LINKS

<https://youtu.be/olhiUYjdJdw>

DAY-5

Multiplying by 10 , 100 , 1000:

a) Whenever a number is multiplied by 10 , we just write the number and

add a zero after it.

$$\text{Ex: } 8 \times 10 = 8 \text{ tens} = 80$$

b) Whenever a number is multiplied by 100 , we just write the number and add two zeros after it.

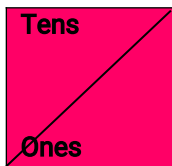
$$\text{Ex : } 4 \times 100 = 4 \text{ hundreds} = 400$$

c) Whenever a number is multiplied by 1000 , we just write the number and add three zeros after it.

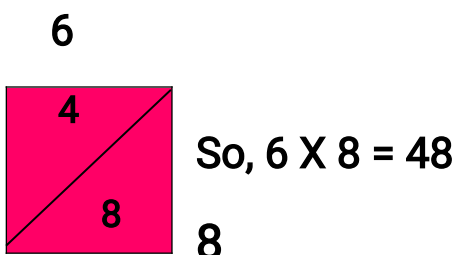
$$\text{Ex : } 7 \times 1000 = 7 \text{ thousands} = 7000$$

Lattice Multiplication

- It is another method of multiplying numbers.
- In this method the box is divided diagonally into 2 parts.
- The upper part is for Tens and the lower part is for Ones.



Example: Multiply : 6 by 8



Rounding off: In the estimated product of a number, we first round off the numbers and then find their product.

- If the product of two or more numbers ends with 1, 2, 3 or 4 then we round it off to the existing tens place.
- If the product of two or more numbers ends with with 5, 6, 7, 8, 9, then we round it off to the next tens place.

• VIDEO-LINKS

<https://youtu.be/p4Mz0Q-KDFo>

RELATED QUESTIONS:

Q1 . Find the product :

- a) 4×1000
- b) $(7 \times 18) \times 10$
- c) $50 \times 50 \times 1$

Q2. Skip count the following and write the answers :

- a) Count by 5 's up to 30 .
- b) Count by 8 's up to 80 .

Q3. Multiply by rounding off the numbers to nearest 10 .

- a) 61×13 b) 125×40

Q4. A postman delivers 45 letters in a day . How many letters does he delivers in 52 days ?

Q5. What is the product of the place value of 3 in 3789 and face value of 6 in 5600 ?