

# MATH



## CHAPTER 6: SUBTRACTION

SUBTRACTION

## ➤ INTRODUCTION

Suppose there are 6 apples in a fruit basket. 2 apples are eaten by Gannu. How many apples will be left? How will you calculate? This problem can be solved by subtraction.

Subtraction means taking away something from a group.

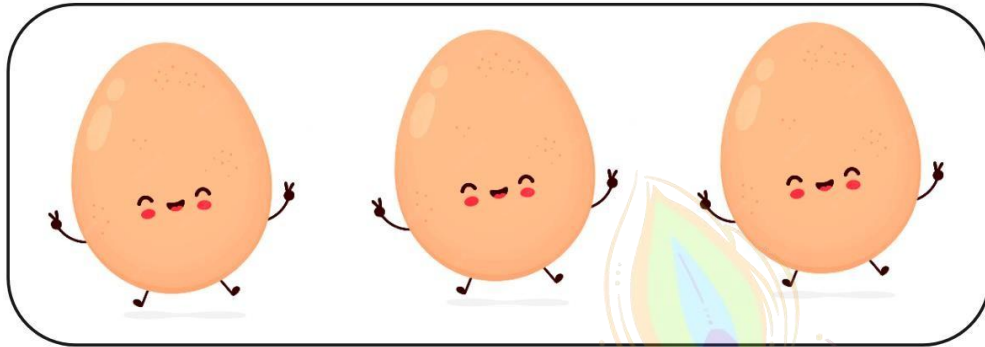
The result of subtraction is known as 'difference'.



The sign used for subtraction is minus (-)

$$\begin{array}{ccccccc}
 \begin{array}{c} \text{Orange} \\ \text{Orange} \\ \text{Orange} \\ \text{Orange} \\ \text{Orange} \end{array} & - & \begin{array}{c} \text{Orange} \\ \text{Orange} \\ \text{Orange} \end{array} & = & \begin{array}{c} \text{Orange} \\ \text{Orange} \end{array} \\
 \begin{array}{c} \boxed{5} \end{array} & - & \begin{array}{c} \boxed{3} \end{array} & = & \begin{array}{c} \boxed{2} \end{array}
 \end{array}$$

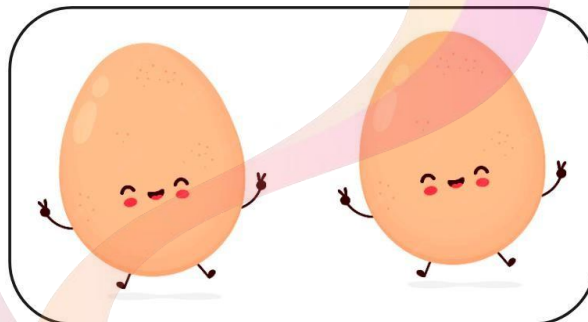
Subtraction means taking out something from some longer unit and in this process finding the outcome as left over. Let's understand this through an example: There are three eggs in the box given below:



**Three eggs**

From this box Steve eats one egg then how many eggs are left?

Steve eats one egg then one egg will disappear from the box as shown below:



**Two eggs**

Now two eggs are seen in the box. Therefore, this means two eggs are left over and the outcome of this subtraction process is 2.

Let's understand it another way:

Total eggs in the box = 3

**[1]** = egg eaten by Steve = **[3] - [1] = [2]**

And 2 = outcome or left over

Here, '-' is the sign of subtraction and it is read as 'minus', and = is the sign of 'is equal to' or 'is same as'.

Thus,

$[3] - [1] = [2]$

It is read as 'three minus one is equal to two' or 'three minus one is same as two'.

➤ **METHODS OF SUBTRACTION**

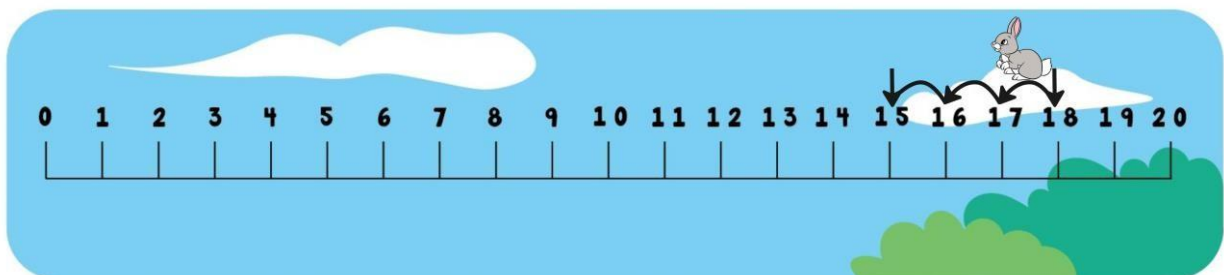
**Vertical subtraction:**

Just like addition, we can do subtraction vertically. Suppose Ram has 8 pencils, out of which he has given 5 pencils to Shyam. How many pencils are left with him now?

**Subtraction using the number line:**

Roni Rabbit wants to subtract 3 from 18. Roni is standing on 18.

To subtract 3 from 18, it has to move 3 steps back



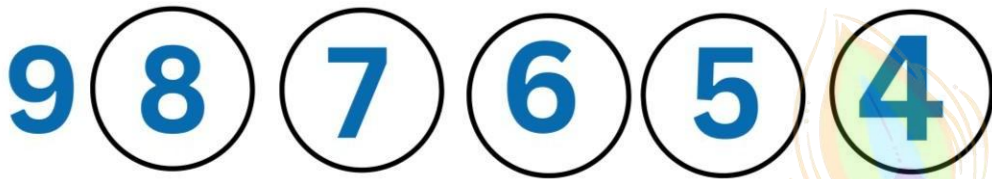


On jumping backwards, Roni Rabbit reaches 15. So,  $18 - 3 = 15$

### Subtraction by backward counting:

Shreya has 9 muffins. She gives 5 to his brother. How many muffins are left with Shreya.

Start from 9 and count 5 numbers backward.



So,  $9 - 5 = 4$

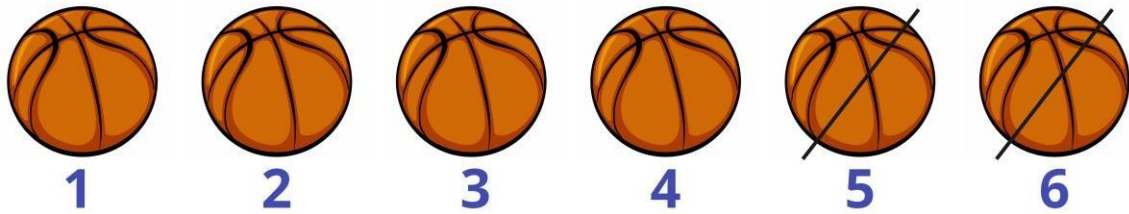
Let us take one more example.

Start from 20 and count 9 numbers backward  $20 - 9 = 11$



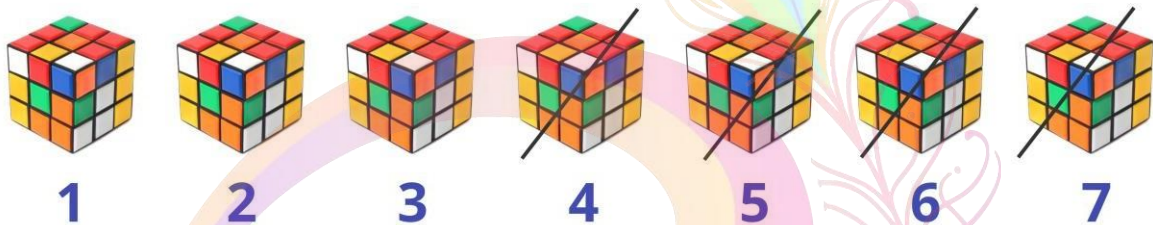
### Subtraction by striking out:

Suppose, Shelly has 6 basket balls. Out of which she lost two balls. How many balls are left with her now?



$$\boxed{6} - \boxed{2} = \boxed{4}$$

Similarly,



Subtraction of zero from a number:



Vineet has seven ice-creams. He gave nothing to his friend. Now how many ice creams does Vineet has?

$$7 - 0 = 7$$

On subtracting zero from a number, we get the number itself.

On subtracting 1 from a number, we get the number just before it.

**Example:**

$$8 - 0 = [?]$$

- (a) 8
- (b) 0
- (c) 6
- (d) 2**

**Answer-** (a)

**Questions:**

**1.**  $16 - 0 = [?]$

- (a) 0
- (b) 15
- (c) 16
- (d) 17

**2.**  $4 - 0 = [?]$

- (a) 5
- (b) 4
- (c) 0
- (d) 1

**Answer-**

**1:** (c)

**2:** (b)

