Addition

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Addition means putting numbers together to find the total or sum. It tells us how many things we have in all.

Example: If a basket has 5 apples and you add 3 more apples, total apples = 5 + 3 = 8

Symbols and Terms

The plus sign (+) is used in addition

The numbers being added are called addends

The result we get is called the sum

Example: In 234 + 156 = 390

234 and 156 are addends

390 is the sum

Properties of Addition

1. Order Property (Commutative Law): Changing the order of the numbers does not change the sum

Example: 34 + 56 = 90 and 56 + 34 = 90

2. Grouping Property (Associative Law): The way numbers are grouped does not change the sum

Example: (10 + 20) + 30 = 10 + (20 + 30) = 60

3. Zero Property: Adding 0 to any number gives the same number

Example: 74 + 0 = 74

How to Add Big Numbers

Step 1: Write the numbers one below the other in columns (ones, tens, hundreds, thousands)

Step 2: Start adding from the rightmost digit (ones place)

Step 3: Carry over if the sum is more than 9 in any column

Step 4: Write the final sum

Example 1:

Question: Add 4,326 and 2,518

Solution:

Example 2:

Question: Add
$$\frac{3}{8}$$
 and $\frac{4}{8}$

Solution:

Since the denominators are the same, add the numerators

$$\frac{3+4}{8} = \frac{7}{8}$$

Answer:
$$\frac{3}{8} + \frac{4}{8} = \frac{7}{8}$$

Summary Points

- Addition helps in finding the total or sum
- Start adding from the rightmost digit (ones)
- Use the carry method for bigger digits
- Properties: Order, Grouping, Zero help in mental math
- Add fractions only if denominators are the same