



## Properties of Zero

### Understanding the Topic

- Zero means nothing or no value
- Zero is a special number in both addition and subtraction
- When we add or subtract zero, the value of the number does not change
- These are called the properties of zero
- Understanding zero helps in solving sums quickly

### Properties of Zero

- When we add zero to a number, the answer is the same number
- When we subtract zero from a number, the answer is the same number
- When we subtract a number from itself, the answer is zero

### Examples with Solutions

#### Example 1

$$5 + 0 = ?$$

**Answer:** 5 (Adding zero changes nothing)

#### Example 2

$$0 + 7 = ?$$

**Answer:** 7 (Zero added to any number stays the same)

#### Example 3

$$9 - 0 = ?$$

**Answer:** 9 (Taking away zero means nothing is removed)

#### Example 4

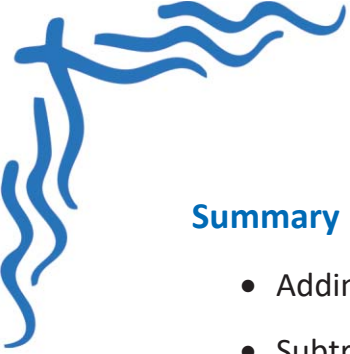
$$4 - 4 = ?$$

**Answer:** 0 (A number minus itself is always zero)

#### Example 5

$$0 + 0 = ?$$

**Answer:** 0 (Zero plus zero is still zero)



### Summary Points

- Adding zero to a number does not change the number
- Subtracting zero from a number gives the same number
- Subtracting a number from itself gives zero
- Zero is a special helper in math
- These rules make addition and subtraction easy and fun