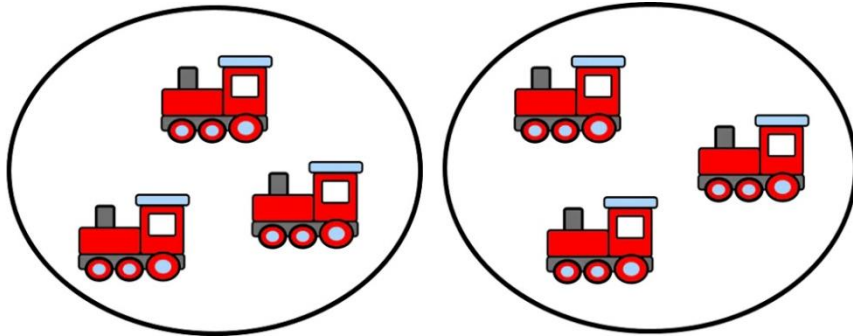


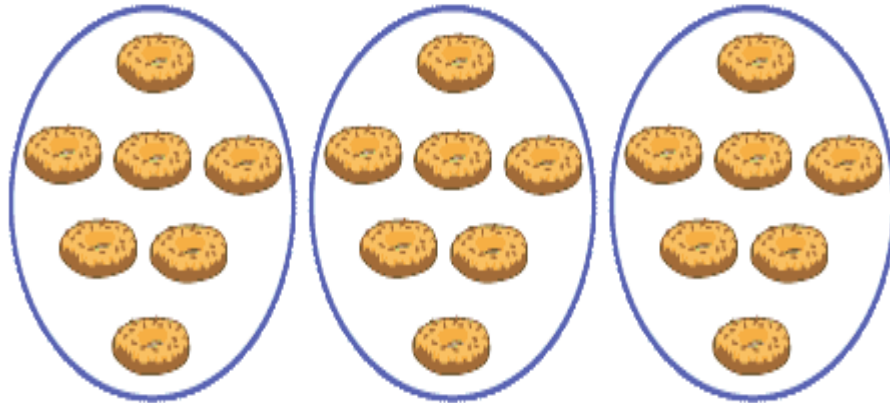
Chapter9: How many Times?

- Properties of Multiplication
 - Multiplication is repeated addition

GROUP OF IN MULTIPLICATION



2 GROUPS OF 3 = $2 \times 3 = 6$



3 GROUPS of 7 = $3 \times 7 = 21$

Multiplication is repeated addition

Example(1): $4+4+4+4+4 = 20$

or

$$5 \times 4 = 20$$

or

5 times 4 is 20

Example(2): $8+8+8+8 = 32$

or

$$4 \times 8 = 32$$

or

4 times 8 is 32

Properties of Multiplication

1) Commutative Property:

Example: $2 \times 3 = 3 \times 2$

Explanation: $2 \times 3 = 6$; $3 \times 2 = 6$

Properties of Multiplication

2) Concept of Zero:

$$\text{Example: } 13 \times 0 = 0$$

$$999 \times 0 = 0$$

Explanation:

Zero multiplied by any number gives zero as an answer.

Properties of Multiplication

3) Identity Property:

$$\text{Example: } 78 \times 1 = 78$$

$$9999 \times 1 = 9999$$

Explanation:

One multiplied by any number gives the same number as an answer.

Things to remember

- **Double of any number means 2 times .**

Example: Double of 5 = $2 \times 5 = 10$

- **Triple of any number means 3 times**

Example: Triple of 5 = $3 \times 5 = 15$

- **Dozen means 12 in number**

Example: A dozen pencil means 12 pencils.

THANK YOU