Multiplication By 10, 20, 30,....., 90

Understanding the Concept

- Multiplying by numbers like 10, 20, 30, up to 90 is easy when we understand the pattern
- These numbers end with a zero (0)
- We first multiply with the number before zero, then add a zero at the end

Example: $4 \times 10 = 40 \rightarrow (4 \times 1 = 4, \text{ then add zero} \rightarrow 40)$

- This method works for 20, 30, 40, up to 90 too
- Helps in quick mental calculations and real-life problems

Easy Method

- Think of 20 as 2 × 10
- Multiply normally, then add a zero at the end

Example: $6 \times 30 = (6 \times 3) = 18$, then add zero $\rightarrow 180$

Examples with Solutions

Example 1:

> 7 × 10 = ?

 \checkmark 7 × 1 = 7 \rightarrow add one zero \rightarrow 70

Example 2:

≻ 5 × 20 = ?

✓ 5 × 2 = 10 \rightarrow add one zero \rightarrow 100

Example 3:

≻ 8 × 40 = ?

✓ 8 × 4 = 32 \rightarrow add one zero \rightarrow 320

Example 4:

A packet has 6 pencils. What is the total in 30 such packets?

✓ $6 \times 30 = 6 \times 3 = 18 \rightarrow \text{add zero} \rightarrow 180 \text{ pencils}$

Example 5:

- > 9 × 50 = ?
- ✓ 9 × 5 = 45 \rightarrow add one zero \rightarrow 450

Summary Points

- Numbers like 10, 20, 30...90 end with zero
- Multiply the non-zero digits first, then add a zero at the end
- This makes big number multiplication faster and easier
- Helps in solving real-life problems quickly
- Practice helps build speed and confidence in multiplication