⚡ Vedic Maths Magic Tricks ⚡

Chapter 3: Multiplication by 5, 25, 50, 250... (By Mere Observation)

The Power of Observation in Vedic Maths

A unique advantage of Vedic Maths is that many big calculations can be solved by **mere observation only** without writing down lengthy steps!

💡 Step 0: Base Building — Multiplying by 10, 100, 1000...

To multiply any number by 10, 100, or 1000, simply append as many zeros to the right of the number as there are in 10, 100, or 1000:

- **35 × 10 ➔ 350**
- **148 × 100 ➔ 14,800**

✨ Core Secret: 5 = 10 / 2 & 50 = 100 / 2 & 25 = 100 / 4

📌 Rule 1: Multiplying Any Number by 5

Since **5 = 10 / 2**, put one **'0'** at the right end of the number and then **take half (divide by 2)**.

24 × 5 = ? ➔ 1. Add zero: **240**
2. Half it: **240 / 2** ➔ **120**

📌 Rule 2: Multiplying Any Number by 50

Since **50 = 100 / 2**, add two **'00's** to the right of the number and then **take half**.

54 × 50 = ? ➔ 1. Add two zeros: **5,400**
2. Half it: **5,400 / 2** ➔ **2,700**

Multiplying by 25 & 250 (The Double-Half Trick)

📌 Rule 3: Multiplying Any Number by 25

Since **25 = 100 / 4**, add two **'00's** to its right and **half it TWICE** (or divide by 4).

64 × 25 = ? ➔

1. Add two zeros: **6,400**
2. Half 1st time: **3,200** ➔ Half 2nd time: **1,600**

➔ **1,600**

📌 Rule 4: Multiplying Any Number by 250

Since **250 = 1000 / 4**, add three **'000's** to its right and **half it TWICE**.

234 × 250 = ? ➔

1. Add three zeros: **234,000**
2. Half 1st: **117,000** ➔ Half 2nd: **58,500**

➔ **58,500**

Quick Visual Reference Cards

⚡ Half Once (÷ 2)

- **× 5** = Add 1 Zero + Half Once
- **× 50** = Add 2 Zeros + Half Once
- **× 500** = Add 3 Zeros + Half Once

⚡ Half Twice (÷ 4)

- **× 25** = Add 2 Zeros + Half Twice
- **× 250** = Add 3 Zeros + Half Twice
- **× 2500** = Add 4 Zeros + Half Twice

📊 Complete Formula Summary Table

Multiplication By	Step 1 (Add Zeros)	Step 2 (Halving Action)	Example Calculation
a) 5 = 10 / 2	Add **one 0** to right	Half the result **once**	62 × 5 = 620 / 2 = **310**
b) 50 = 100 / 2	Add **two 0's** to right	Half the result **once**	62 × 50 = 6200 / 2 = **3,100**
c) 500 = 1000 / 2	Add **three 0's** to right	Half the result **once**	62 × 500 = 62000 / 2 = **31,000**
d) 25 = 100 / 4	Add **two 0's** to right	Half the result **twice**	62 × 25 = 6200 / 4 = **1,550**
e) 250 = 1000 / 4	Add **three 0's** to right	Half the result **twice**	62 × 250 = 62000 / 4 = **15,500**

✏️ Practice Exercises & Solutions

Solve these problems mentally using mere observation:

#	Problem	Mental Strategy	Final Answer
1	46 × 5	460 / 2	**230**
2	74 × 50	7,400 / 2	**3,700**
3	92 × 500	92,000 / 2	**46,000**
4	234 × 250	234,000 / 4 (117,000 ➔ 58,500)	**58,500**
5	88 × 25	8,800 / 4 (4,400 ➔ 2,200)	**2,200**