⚡ Vedic Maths Magic Tricks ⚡

Chapter 2: Dodging Times Tables Up To 99

Mastering Tables 12 to 19 (Using Tables 2 to 9)

Did you know? You don't need to memorize huge times tables! If you already know basic tables from **2 to 9**, you can calculate **12 to 19** tables in your head in seconds!

🎯 The Golden Pattern: Add the Multiplier Factor to the Tens Place!

Let's compare the **2 Times Table** with the **12 Times Table** to discover the secret connection:

Base Table (×2)	Target Table (×12)	Secret Relationship Pattern
2 × 1 = 02	12 × 1 = 12	Add 1 to Tens Digit (0+1 = 1) ➔ 12
2 × 2 = 04	12 × 2 = 24	Add 2 to Tens Digit (0+2 = 2) ➔ 24
2 × 3 = 06	12 × 3 = 36	Add 3 to Tens Digit (0+3 = 3) ➔ 36
2 × 4 = 08	12 × 4 = 48	Add 4 to Tens Digit (0+4 = 4) ➔ 48
2 × 5 = 10	12 × 5 = 60	Add 5 to Tens Digit (1+5 = 6) ➔ 60
2 × 6 = 12	12 × 6 = 72	Add 6 to Tens Digit (1+6 = 7) ➔ 72
2 × 7 = 14	12 × 7 = 84	Add 7 to Tens Digit (1+7 = 8) ➔ 84
2 × 8 = 16	12 × 8 = 96	Add 8 to Tens Digit (1+8 = 9) ➔ 96
2 × 9 = 18	12 × 9 = 108	Add 9 to Tens Digit (1+9 = 10) ➔ 108

💡 The Rule Summary

To get 12 × N, calculate 2 × N. Then add N to the tens digit, while keeping the ones digit exactly the same!

Step-by-Step Solved Examples (Tables 12 & 13)

📌 Example 1: Find 12 × 7

12 × 7 = ? ➔ 1. Base Table: 2 × 7 = **14**
2. Add factor (7) to tens digit: **1 + 7 = 8** ➔ **84**

📌 Example 2: Find 12 × 9

12 × 9 = ? ➔ 1. Base Table: 2 × 9 = **18**
2. Add factor (9) to tens digit: **1 + 9 = 10** ➔ **108**

Extending to Tables 13 through 19

The exact same rule applies to **13 (use table of 3)**, **14 (use table of 4)**, up to **19 (use table of 9)**!

📌 Example 3: Find 13 × 6

13 × 6 = ? ➔ 1. Base Table: 3 × 6 = **18**
2. Add factor (6) to tens digit: **1 + 6 = 7** ➔ **78**

📌 Example 4: Find 13 × 8

13 × 8 = ? ➔ 1. Base Table: 3 × 8 = **24**
2. Add factor (8) to tens digit: **2 + 8 = 10** ➔ **104**

More Higher Table Examples (14, 15, 17, 19)

14 × 4 = ?
- Base: 4 × 4 = **16**
- Tens addition: 1 + 4 = **5**
- Answer = **56**

15 × 3 = ?
- Base: 5 × 3 = **15**
- Tens addition: 1 + 3 = **4**
- Answer = **45**

17 × 7 = ?
- Base: 7 × 7 = **49**
- Tens addition: 4 + 7 = **11**
- Answer = **119**

19 × 8 = ?
- Base: 9 × 8 = **72**
- Tens addition: 7 + 8 = **15**
- Answer = **152**

✏️ Kids Practice Exercise!

Find the product of the following using the mental addition trick:

#	Problem	Mental Step	Product Answer
1	14 × 6	4 × 6 = 24 ➔ (2 + 6 = 8) ➔ 84	**84**
2	15 × 4	5 × 4 = 20 ➔ (2 + 4 = 6) ➔ 60	**60**
3	16 × 3	6 × 3 = 18 ➔ (1 + 3 = 4) ➔ 48	**48**
4	17 × 5	7 × 5 = 35 ➔ (3 + 5 = 8) ➔ 85	**85**
5	18 × 7	8 × 7 = 56 ➔ (5 + 7 = 12) ➔ 126	**126**
6	19 × 9	9 × 9 = 81 ➔ (8 + 9 = 17) ➔ 171	**171**