

1. Multiplying by 10:

- Simply add a zero to the end of the number.
- Example: $5 \times 10 = 50$

2. Multiplying by 5:

- Multiply the number by 10 and then divide by 2.
- Example: $8 \times 5 = (8 \times 10) / 2 = 40$

3. Multiplying by 9:

- Hold up your fingers. For 9×7 , bend down your 7th finger.
- The number of fingers before the bent finger is the tens digit (6).
- The number of fingers after the bent finger is the ones digit (3).
- So, $9 \times 7 = 63$.

4. Multiplying by 11:

- For a two-digit number, place the sum of the digits between the digits.
- Example: $11 \times 45 = 4(4+5)5 = 495$

5. Multiplying by 12:

- Multiply the number by 10 and then add twice the number.
- Example: $12 \times 6 = (6 \times 10) + (6 \times 2) = 60 + 12 = 72$

6. Squaring a Two-Digit Number Ending in 5:

- Multiply the tens digit by the next number and place 25 at the end.
- Example: $35 \times 35 = (3 \times 4)25 = 1225$

7. Multiplying by 25:

- Add two zeros to the number and then divide by 4.
- Example: $25 \times 16 = (1600 / 4) = 400$

8. The Lattice Method:

- A visual method for multiplying multi-digit numbers.
- Draw a grid, split the numbers, and multiply each digit.
- Add the diagonals to get the final product.

9. The Russian Peasant Multiplication:

- A binary-based method involving halving and doubling.
- Write the two numbers side by side.
- Halve the first number, discarding remainders, and double the second.
- Repeat until the first number is 1.

- Add the remaining numbers in the second column corresponding to odd numbers in the first column.

10. Vedic Math:

- A collection of ancient Indian mathematical techniques.
- Includes various methods like Nikhilam Sutra, Urdhva Tiryagbhyam, and more.

Remember: Practice is key to mastering these tricks! The more you use them, the faster and more accurate you'll become.

