



## Pattern in Multiplication

### Understanding Pattern in Multiplication

- Patterns in multiplication are repeated number arrangements seen in tables and products.
- These patterns help us learn tables easily and understand number relationships.
- We can see patterns in digits, ending numbers, increasing steps, or repeated results.
- Multiplication patterns make solving problems faster and more fun.
- Recognizing patterns in multiplication improves mental math and logical thinking.

### Examples with Solutions

**Example:** Observe the pattern:

$$2 \times 1 = 2,$$

$$2 \times 2 = 4,$$

$$2 \times 3 = 6,$$

$$2 \times 4 = 8$$

✓ The result increases by 2 each time

✓ Next:  $2 \times 5 = 10$

**Answer:** 10

**Example:** Pattern in the 5 times table: 5, 10, 15, 20, 25

✓ Each number ends in 0 or 5

✓ This pattern helps us remember 5's table easily

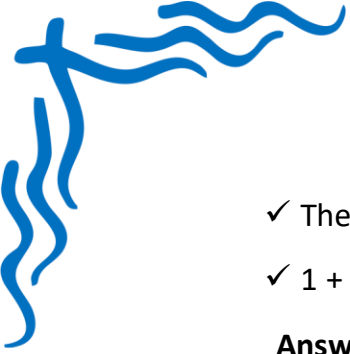
**Answer:** Ends in 0 or 5

**Example:** Multiply 9 with increasing numbers:

$$9 \times 1 = 9,$$

$$9 \times 2 = 18,$$

$$9 \times 3 = 27$$



✓ The digits of the answer add up to 9

✓  $1 + 8 = 9$ ,  $2 + 7 = 9$

**Answer:** Sum of digits = 9

**Example:** Square pattern:

$$1 \times 1 = 1,$$

$$2 \times 2 = 4,$$

$$3 \times 3 = 9,$$

$$4 \times 4 = 16$$

✓ Each is a square number

✓ Next:  $5 \times 5 = 25$

**Answer:** 25

**Example:** Look at 10's multiplication:

$$10 \times 1 = 10,$$

$$10 \times 2 = 20,$$

$$10 \times 3 = 30$$

✓ Just add a 0 after the number

✓  $10 \times 6 = 60$

**Answer:** 60

## Summary Points

- Multiplication patterns help in learning tables quickly.
- Look for repeating digits, sums, and patterns in answers.
- Recognizing patterns builds confidence in solving bigger sums.
- Patterns can be in digits, results, or ending numbers.
- These patterns make multiplication easier, faster, and more interesting.