# **Checking Multiples by Division**

## **Understanding Checking Multiples by Division**

- We can check if a number is a multiple of another number using division.
- If a number divides exactly with no remainder, then it is a multiple.
- If there is a remainder, then the number is not a multiple.
- This method is useful for large numbers or quick checking.

#### **How to Check**

- Divide the number by the smaller number
- If the remainder is 0, it is a multiple
- If the remainder is not 0, it is not a multiple

### **Examples with Solutions**

**Example:** Is 24 a multiple of 6?

Solution:  $24 \div 6 = 4$  (no remainder)

Yes, 24 is a multiple of 6

**Example:** Is 35 a multiple of 5?

Solution:  $35 \div 5 = 7$  (no remainder)

Yes, 35 is a multiple of 5

**Example:** Is 19 a multiple of 4?

Solution:  $19 \div 4 = 4$  remainder 3

No, 19 is not a multiple of 4

Example: Is 45 a multiple of 9?

Solution:  $45 \div 9 = 5$  (no remainder)

Yes, 45 is a multiple of 9

Example: Is 27 a multiple of 8?

Solution:  $27 \div 8 = 3$  remainder 3

No, 27 is not a multiple of 8

## **Summary Points**

- To check if a number is a multiple, divide it by the given number.
- If remainder is 0, it is a multiple.
- If remainder is not 0, it is not a multiple.
- This method works well for both small and big numbers.
- Division helps us find multiples quickly and correctly.