# Dividing 4-digit number by 1-digit

## **Understanding Notes**

- Division is the process of sharing or splitting into equal parts
- A 4-digit number has four digits, like 1000, 2345, or 9876
- A 1-digit number ranges from 1 to 9
- In division, the number we divide is called the dividend
- The number we divide by is called the divisor
- The result of division is called the quotient
- Sometimes there is a number left over, which is called the remainder
- We divide each digit of the 4-digit number one by one using long division
- We can always check our answer using the formula:

**Dividend = Divisor × Quotient + Remainder** 

• Division is useful in solving real-life problems like sharing and grouping

**Answer:**  $8256 \div 6 = 1376$ 

### **Examples with Solutions**

Example 1: 2484 ÷ 4

✓ **Step 1:** 4 goes into 24 six times

✓ Step 2: Bring down  $8 \rightarrow 8 \div 4 = 2$ 

✓ Step 3: Bring down  $4 \rightarrow 4 \div 4 = 1$ 

**Answer:**  $2484 \div 4 = 621$ 

Example 2: 5340 ÷ 5

✓ **Step 1:** 5 into 5 = 1

✓ Step 2:  $3 \div 5 = 0$ , carry 3 to next digit

✓ Now  $34 \div 5 = 6$ , remainder 4

✓ Bring down  $0 \rightarrow 40 \div 5 = 8$ 

**Answer:**  $5340 \div 5 = 1068$ 

**Example 3: Fill in the blank** 

✓ Multiply  $1376 \times 6 = 8256$ 

#### **Example 4: Word Problem**

A factory made 9280 toys. These toys were packed in boxes of 8 each. How many boxes were used

✓ Divide  $9280 \div 8 = 1160$ 

**Answer:** 1160 boxes were used

#### **Example 5: Check with multiplication**

✓ Divide  $4312 \div 4 = 1078$ 

✓ Check:  $1078 \times 4 = 4312$ 

#### **Answer is correct**

#### **Summary Point**

- Dividing a 4-digit number by a 1-digit number means breaking a big number into equal smaller parts
- Use long division method step by step
- You may get a remainder in some cases
- Always check your answer using multiplication
- Practice helps in solving faster and understanding division better