Division of Large Numbers

In division,

- The number we divide is called the dividend.
- The number by which we divide is called the divisor.
- The answer we get after the division is called the quotient.
- The number left after the division is called the remainder.
- To check the division done, multiply the quotient and the divisor. Add the product to the remainder. It should be equal to the dividend.
- : Divisor × Quotient + Remainder = Dividend

For the division of large numbers, we follow the same method as we have followed to divide 4-digit numbers by 1-digit and 2-digit numbers. Keep in mind the following tips.

- Start division from the extreme left.
- If the first digit of the dividend is less than the divisor, then take the first two digits together.

If the number formed by these digits is still less than the divisor then take three digits together and so on.

Division by 10, 100 And 1,000 Division by 10

A dividend when divided by 10 gives a remainder equal to the digit at the ones place in the dividend. All the remaining digits in the dividend form the quotient.

Example: 24,531 ÷ 10 = 2453 Quotient 1 Remainder

Division by 100

A dividend when divided by 100 gives a remainder equal to the digits at the ones and the tens place in the dividend. All the digits in the remaining dividend form the quotient.

Example: 75, 887 ÷ 100 = 758 Quotient 87 Remainder

Division by 1,000

A dividend when divided by 1, 000 gives a remainder equal to the digits at the ones, tens and hundreds place in the dividend. All the remaining digits in the dividend form the quotient.

Example: 49, 955 ÷ 1,000 = 49 Quotient 955 Remainder

Division of 6-Digit Numbers by a 3-Digit Number

Example: Divide 5, 75, 825 ÷ 275

Solution: Follow the same division steps as earlier.

• 275 × 2 = 550	2094
• 275 × 0 = 0	275) 5 7 5 8 2 5
• 275 × 9 = 2,475	-5 5 0 ↓
• 275 × 4 = 1100	258
	– o↓
So, Quotient = 2094	2582
	-2475
and Remainder = 250	1075
	- 825
	250