

RD SHARMA

Solutions

Class 8 Maths

Chapter 5

Ex 5.1

1. Without performing actual addition and division write the quotient when the sum of 69 and 96 is divided by:

(i) 11

(ii) 15

Soln:

(i) Clearly, 69 and 96 are two numbers such that one can be obtained by reversing the digits of the other. Therefore, when the sum of 69 and 96 is divided by 11, we get 15 (sum of the digits) as the quotient.

(ii) Clearly, 69 and 96 are two numbers such that one can be obtained by reversing the digits of the other. Therefore, when the sum of 69 and 96 is divided by 15 (sum of the digits), we get 11 as the quotient.

2. Without performing actual computations, find the quotient when $94 - 49$ is divided by:

(i) 9

(ii) 5

Soln:

(i) We know that when $\overline{ab} - \overline{ba}$ is divided by 9, the quotient is $a - b$. Therefore, when $(94 - 49)$ is divided by 9, the quotient is $(9 - 4 = 5)$.

(ii) We know that when $\overline{ab} - \overline{ba}$ is divided by $(a - b)$, the quotient is 9. Therefore, when $(94 - 49)$ is divided by $(9 - 4 = 5)$, the quotient is 9

3. If sum of the number 985 and two other number obtained by arranging the digits of 985 in cyclic order is divided by 111, 22 and 37 respectively. Find the quotient in each case.

Soln:

The sum of $(985 + 859 + 598)$ when divided by:

(i) 111 $Quotient = (9 + 8 + 5) = 22$

(ii) 22 i.e. $(9 + 8 + 5) Quotient = 111$

(iii) 37 $(= \frac{111}{3}) Quotient = 3(9 + 8 + 5) = 66$

4. Find the quotient when the difference of 985 and 958 is divided by 9.

Soln:

If $\overline{abc} - \overline{acb}$ is divided by 9, the quotient is $(b - c)$.

\therefore If $(985 - 958)$ is divided by 9

Quotient $= (8 - 5) = 3$