

RD SHARMA

Solutions

Class 6 Maths

Chapter 4

Ex 4.4

Q1. Does there exist a whole number 'a' such that $a/a = a$?

Solution: Yes, there exists a whole number 'a' such that $a/a = a$.

The whole number is 1 such that,

$$1 / 1 = 1$$

Q2. Find the value of:

Solution: (i) $23457 / 1 = 23457$

(ii) $0 / 97 = 0$

(iii) $476 + (840 / 84) = 476 + 10 = 486$

(iv) $964 - (425 / 425) = 964 - 1 = 963$

(v) $(2758 / 2758) - (2758 + 2758) = 1 - 1 = 0$

(vi) $72450 / (583 - 58) = 72450 + 525 = 138$

Q3. Which of the following statements are true:

Solution: (i) False

LHS: $10 / (5 \times 2)$

$= 10 / 10$

$= 1$

RHS: $(10 / 5) \times (10 / 2)$

$= 2 \times 5 = 10$

(ii) True

LHS: $(35 - 14) / 7$

$= 21 / 7$

$= 3$

RHS: $35 / 7 - 14 / 7$

$= 5 - 2 = 3$

(iii) False

LHS: $35 - 14 / 7$

$= 35 - 2 = 33$

RHS: $35 / 7 - 14 / 7$

$= 5 - 2$

$= 3$

(iv) False

LHS: $(20 - 5) / 5$

$= 15 / 5$

$= 3$

RHS: $20 / 5 - 5$

$= 4 - 5 = -1$

(v) False

LHS: $12 \times (14 / 7)$

$= 12 \times 2$

$= 24$

RHS: $(12 \times 14) / (12 \times 7)$

$= 168 / 84$

$= 2$

(vi) True

LHS: $(20 / 5) / 2$

$= 4 / 2$

$= 2$

$$\text{RHS : } (20 / 2) / 5$$

$$= 10 / 5$$

$$= 2$$

Q4. Divide and check the quotient and remainder:

Solution: (i) $7777 / 58 = 134$

$$\begin{array}{r} 134 \\ 58 \overline{) 7772} \\ \underline{-58} \\ 197 \\ \underline{-174} \\ 232 \\ \underline{-232} \\ 0 \end{array}$$

Verification: [Dividend = Divisor x Quotient + Remainder]

$$7772 = 58 \times 134 + 0$$

$$7772 = 7772$$

$$\text{LHS} = \text{RHS}$$

(ii) $6906 / 35$ gives quotient = 197 and remainder = 11

$$\begin{array}{r} 197 \\ 35 \overline{) 6906} \\ \underline{-35} \\ 340 \\ \underline{-315} \\ 256 \\ \underline{-245} \\ 11 \end{array}$$

Verification: [Dividend = Divisor x Quotient + Remainder]

$$6906 = 35 \times 197 + 11$$

$$6906 = 6895 + 11$$

$$6906 = 6906$$

$$\text{LHS} = \text{RHS}$$

(iii) $16135 / 875$ gives quotient = 18 and remainder = 385.

$$\begin{array}{r} 18 \\ 875 \overline{) 16135} \\ \underline{-875} \\ 7385 \\ \underline{-7000} \\ 385 \end{array}$$

Verification: [Dividend = Divisor x Quotient + Remainder]

$$16135 = 875 \times 18 + 385$$

$$16135 = 15750 + 385$$

$$16135 = 16135$$

$$\text{LHS} = \text{RHS}$$

(iv) $16025/1000$ gives quotient and remainder = 25

$$\begin{array}{r} 16 \\ 1000 \overline{) 16025} \\ \underline{-1000} \\ 6025 \\ \underline{-6000} \\ 25 \end{array}$$

Verification: [Dividend = Divisor x Quotient + Remainder]

$$16025 = 1000 \times 16 + 25$$

$$16025 = 16000 + 25$$

$$16025 = 16025$$

$$\text{LHS} = \text{RHS}$$

Q5. Find a number which when divided by 35 gives the quotient 20 and remainder 18.

Solution: Dividend = Divisor x Quotient + Remainder

$$\text{Dividend} = 35 \times 20 + 18$$

$$= 700 + 18$$

$$= 718$$

Q6. Find the number which when divided by 58 gives a quotient 40 and remainder 31.

Solution: Dividend = Divisor x Quotient + Remainder

$$\text{Dividend} = 58 \times 40 + 31$$

$$= 2320 + 31$$

$$= 2351$$

Q7. The product of two numbers is 504347. If one of the numbers is 1591, find the other.

Solution: Product of two numbers = 504347

One of the two numbers = 1591

Let the number be A.

Therefore, $A \times 1591 = 504347$

$$\begin{array}{r} 317 \\ 1591 \overline{) 504347} \\ \underline{-4773} \\ 2704 \\ \underline{-1591} \\ 11137 \\ \underline{-11137} \\ 0 \end{array}$$

$$A = 504347/1591 = 317$$

Q8. On dividing 59761 by a certain number, the quotient is 189 and the remainder is 37. Find the divisor.

Solution: Dividend = 59761

Quotient = 189

Remainder = 37

Divisor = A

Now, Dividend = Divisor x Quotient + Remainder

$$59761 = A \times 189 + 37$$

$$59761 - 37 = A \times 189$$

$$59724 = A \times 189$$

Therefore, $A = 59724 \div 189$

$$= 316$$

Q9. On dividing 55390 by 299, the remainder is 75. Find the quotient.

Solution: Dividend = 55390

Divisor = 299

Remainder = 75

Quotient = A

Dividend = Divisor x Quotient + Remainder

$$55390 = 299 \times A + 75$$

$$55390 - 75 = A \times 299$$

$$55315 = A \times 299$$

Therefore, $A = 55315 \div 299 = 185$