

ODM PUBLIC SCHOOL

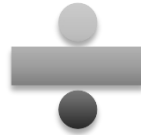
SESSION : 2
CLASS : V
SUBJECT : MATHEMATICS
CHAPTER NUMBER : 5
CHAPTER NAME : OPERATIONS ON LARGER NUMBERS
SUBTOPIC : Long division
Exercise - 5 C Q.No 2

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE

Students will be able to do the division using long division method.

DIVISION OF LARGE NUMBERS



Long Division

- Long division is as simple as memorizing the people in this family.



Dad



Mom



Sister



Brother



Rover

Long Division

- Each person represents a step in the long division process.



1. Divide

Dad



Sister

3. Subtract



Brother

4. Bring down



2. Multiply

Mom



Rover

**5. Repeat or
Remainder**

Step 1 in Long Division



Dad

1. Divide

- Divide 2 into first number in the dividend.
- Think how many 2's will fit into 9.
- Write that number directly above the number you divided into.

$$\begin{array}{r} 4 \\ 2 \overline{) 947} \end{array}$$

How many 2's
will go into 9?



Step 2 in Long Division



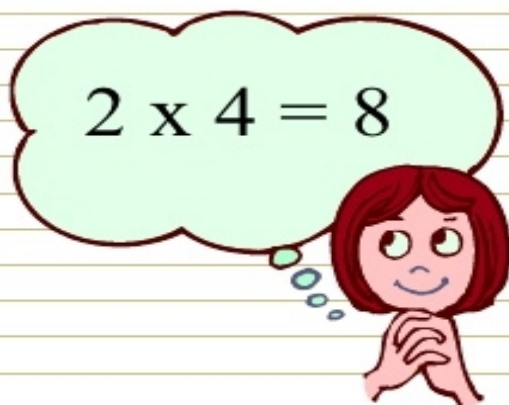
Mom

2. Multiply

$$\begin{array}{r} 2 \overline{) 947} \\ \underline{8} \\ \end{array}$$

The diagram shows a long division problem: 2 divided into 947. A red arrow points from the 2 to the 4 in the quotient. The number 4 is written above the 4 in the dividend, and the number 8 is written below the 9 in the dividend.

- Multiply the divisor times the first number in the quotient.
- Write your answer directly under the 9 or the number you just divided into.



Step 3 in Long Division



Sister

3. Subtract

- Draw a line under the 8.
- Write a subtraction sign next to the 8.
- Subtract 8 from 9.
- Write your answer directly below the 8.

$$\begin{array}{r} 4 \\ \hline 2 \overline{) 947} \\ \underline{-8} \\ 1 \end{array}$$

Step 4 in Long Division



4. Bring down

Brother

$$\begin{array}{r} 4 \\ \hline 2 \overline{) 947} \\ \underline{-8} \\ 14 \end{array}$$

- Go to the next number in the dividend to the right of the 9.
- Write an arrow under the 4.
- Bring the 4 down next to the 1.

Step 5 in Long Division



Rover

5. Repeat or Remainder

- This is where you decide whether you repeat the 5 steps of division.
- If your divisor can divide into your new number, 14, or if you have numbers in the dividend that have not been brought down, you repeat the 5 steps of division.

$$\begin{array}{r} 4 \\ \hline 2 \overline{) 947} \\ \underline{-8} \\ 14 \end{array}$$

EXAMPLE-1

$$419634 \div 38$$

$$\begin{array}{r} 11043 \\ 38 \overline{) 419634} \\ \underline{38} \\ 39 \\ \underline{38} \\ 163 \\ \underline{152} \\ 114 \\ \underline{114} \\ 0 \end{array}$$

Ans:

Quotient = 11043

Remainder=0

EXAMPLE-2

$$364865 \div 57$$

$$\begin{array}{r} 6401 \\ 57 \overline{) 364865} \\ \underline{342} \\ 228 \\ \underline{228} \\ 065 \\ \underline{57} \\ 8 \end{array}$$

Ans:

Quotient = 6401

Remainder = 8

EXAMPLE-3

$$36648067 \div 943$$

$$\begin{array}{r} 38863 \\ 943 \overline{) 36648067} \\ \underline{2829} \\ 8358 \\ \underline{7544} \\ 8140 \\ \underline{7544} \\ 5966 \\ \underline{5658} \\ 3087 \\ \underline{2829} \\ 258 \end{array}$$

Ans:

Quotient = 38863

Remainder = 258

EXERCISE 5 (C)

2. Divide and find the quotient and the remainder. Check your answer using the relationship: $\text{Dividend} = \text{Divisor} \times \text{Quotient} + \text{Remainder}$

a) $62643 \div 56 =$

Ans:

Quotient = 1118

Remainder = 35

Checking :

$$\begin{aligned} & \text{Divisor} \times \text{Quotient} + \text{Remainder} \\ & = 56 \times 1118 + 35 = 62643 = \text{Dividend} \end{aligned}$$

EXERCISE 5 (C)

2. Divide and find the quotient and the remainder. Check your answer using the relationship: $\text{Dividend} = \text{Divisor} \times \text{Quotient} + \text{Remainder}$

b) $342616 \div 47$

= Ans:

Quotient = 7289

Remainder = 33

Checking :

Quotient \times Divisor + Remainder

= $7289 \times 47 + 33 = 342616 = \text{Dividend}$

EXERCISE 5 (C)

2. Divide and find the quotient and the remainder. Check your answer using the relationship: $\text{Dividend} = \text{Divisor} \times \text{Quotient} + \text{Remainder}$

c) $5177365 \div 63 =$

Ans:

$$\text{Quotient} = 82180$$

$$\text{Remainder} = 25$$

Checking :

$$\begin{aligned} &\text{Quotient} \times \text{Divisor} + \text{Remainder} \\ &= 82180 \times 63 + 25 = 5177365 = \text{Dividend} \end{aligned}$$

EXERCISE 5 (C)

2. Divide and find the quotient and the remainder. Check your answer using the relationship: $\text{Dividend} = \text{Divisor} \times \text{Quotient} + \text{Remainder}$

d) $4810348 \div 75 =$

Ans:

Quotient = 64137

Remainder = 73

Checking :

$$\begin{aligned} &\text{Quotient} \times \text{Divisor} + \text{Remainder} \\ &= 64137 \times 75 + 73 = 4810348 = \text{Dividend} \end{aligned}$$

EXERCISE 5 (C)

2. Divide and find the quotient and the remainder. Check your answer using the relationship: $\text{Dividend} = \text{Divisor} \times \text{Quotient} + \text{Remainder}$

e) $51693 \div 483 =$

Ans:

Quotient = 107

Remainder = 12

Checking :

Quotient \times Divisor + Remainder

$= 107 \times 483 + 12 = 51693 = \text{Dividend}$

EXERCISE 5 (C)

2. Divide and find the quotient and the remainder. Check your answer using the relationship: $\text{Dividend} = \text{Divisor} \times \text{Quotient} + \text{Remainder}$

f) $68085 \div 583 =$

Ans:

Quotient = 116

Remainder = 457

Checking :

Quotient \times Divisor + Remainder

$= 116 \times 583 + 457 = 68085 = \text{Dividend}$

LEARNING OUTCOME

Students can be able to do the division using long division method.

HOME WORK

Complete exercise - 5 C Q.No. 2 in the notebook.

THANKING YOU
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