

Class - IV Term-II examination

4th Chapter

Division

* What is division?

⇒ The operation which makes equal groups.

Division sign: -

A symbol indicating that one number is to be divided by another. Division is also indicated as a fraction, i.e. $\frac{29}{8}$ ($29 \div 8$)

* Divide a number using long division method.

① $24 \div 1$

$$\begin{array}{r} 6 \leftarrow \text{Quotient (Q)} \\ \text{Divisor } \rightarrow 1 \overline{) 24} \leftarrow \text{Dividend} \\ \underline{- 24} \leftarrow 2 \times 6 \\ 0 \leftarrow \text{Remainder (R)} \end{array}$$

② $66 \div 8$

$$\begin{array}{r} 8 \leftarrow \text{Quotient (Q)} \\ \text{Divisor } \rightarrow 8 \overline{) 66} \leftarrow \text{Dividend} \\ \underline{- 64} \leftarrow 8 \times 8 \\ 2 \leftarrow \text{Remainder (R)} \end{array}$$

*) When a number is divided by 1, Quotient is the number itself.

$$23 \div 1 = 23$$

**) When a number is divided by itself, the quotient is always 1.

$$9 \div 9 = 1, 8 \div 8 = 1$$

*) When 0 is divided by any number the quotient is always 0.

$$0 \div 6 = 0, 0 \div 23 = 0, 0 \div 35 = 0$$

*) Division by 0 is meaningless.

Checking Division

If $\text{Quotient} \times \text{Divisor} + \text{Remainder} = \text{Dividend}$
then the division is correct.

Example:- Divide 37 by 5 and check your answer.

$$\begin{array}{r} 7 \\ 5 \overline{) 37} \\ \underline{- 35} \\ 2 \end{array}$$

Here, Divisor = 5

Dividend = 37.

Quotient = 7.

Remainder = 2

Checking division:-

Quotient \times Divisor + Remainder = Dividend.

$$7 \times 5 + 2 = 37.$$

Ans:- Since Quotient \times Divisor + Remainder = Dividend.

The quotient and the remainder are correct.

$$5) 924 \div 8 =$$

$$\text{Quotient} = 115$$

$$\text{Remainder} = 4$$

$$\begin{array}{r} 115 \\ 8 \overline{) 924} \\ \underline{-8} \\ 12 \\ \underline{-8} \\ 44 \\ \underline{-40} \\ 4 \end{array}$$

$$6) 874 \div 7$$

$$\text{Quotient} = 124$$

$$\text{Remainder} = 6$$

$$\begin{array}{r} 124 \\ 7 \overline{) 874} \\ \underline{-7} \\ 17 \\ \underline{-14} \\ 34 \\ \underline{-28} \\ 6 \end{array}$$

$$7) 9543 \div 3$$

$$\text{Quotient} = 3181$$

$$\text{Remainder} = 0$$

$$\begin{array}{r} 3181 \\ 3 \overline{) 9543} \\ \underline{-9} \\ 5 \\ \underline{-3} \\ 24 \\ \underline{-21} \\ 03 \\ \underline{-3} \\ 0 \end{array}$$

$$8) 1568 \div 2$$

$$\text{Quotient} = 2284$$

$$\text{Remainder} = 0$$

$$\begin{array}{r} 2284 \\ 2 \overline{) 1568} \\ \underline{-4} \\ 05 \\ \underline{-4} \\ 16 \\ \underline{-16} \\ 08 \\ \underline{-8} \\ 0 \end{array}$$

$$9) 8616 \div 6$$

$$\text{Quotient} = 1436$$

$$\text{Remainder} = 0$$

$$\begin{array}{r} 1436 \\ 6 \overline{) 8616} \\ \underline{-6} \\ 26 \\ \underline{-24} \\ 21 \\ \underline{-18} \\ 36 \\ \underline{-36} \\ 0 \end{array}$$

$$10) 7550 \div 4$$

$$\text{Quotient} = 1887$$

$$\text{Remainder} = 2$$

$$\begin{array}{r} 18870 \\ 4 \overline{) 7550} \\ \underline{-4} \\ 35 \\ \underline{-32} \\ 35 \\ \underline{-32} \\ 30 \\ \underline{-28} \\ 2 \end{array}$$

B) Divide and check your answer.

1) $78 \div 5$

$$\begin{array}{r} 15 \\ 5 \overline{) 78} \\ \underline{-5} \\ 28 \\ \underline{-25} \\ 0 \end{array}$$

check:-

$$15 \times 5 + 0 = 75 \text{ (Dividend)}$$

Ans: $\rightarrow Q = 15, R = 0.$

3) $649 \div 3$

$$\begin{array}{r} 216 \\ 3 \overline{) 649} \\ \underline{-6} \downarrow \\ 04 \downarrow \\ \underline{-3} \downarrow \\ 19 \\ \underline{-18} \\ 1 \end{array}$$

check:-

$$216 \times 3 + 1 = 649 \text{ (Dividend)}$$

Ans: $\rightarrow Q = 216, R = 1.$

Note: Follow the same method to solve rest of the questions from ex- 4.1.

Rules for division by 10, 100, and 1000:

Rules for 10:-

When a number is divided by 10, the digit in the ones place makes up the remainder, the rest of the digits make up the quotient.

Rules for 100:-

When a number is divided by 100, the digits in the tens and ones place make up the remainder, the rest of the digits make up the quotient.

Rules for 1000:-

When a number is divided by 1000, the digits in the hundreds, tens, ones place make up the remainder, the rest of the digits make up the quotient.

$$5) 9092 \div 100 = \frac{Q}{90} \quad \frac{R}{92}$$

$$6) 9999 \div 100 = 99 \quad 99$$

Find the quotient and remainder without doing long division:

$$1) 1472 \div 1000 = \frac{Q}{1} \quad \frac{R}{472}$$

$$2) 6900 \div 1000 = 6 \quad 900$$

$$3) 1005 \div 1000 = 1 \quad 5$$

$$4) 7088 \div 1000 = 7 \quad 88$$

$$5) 62841 \div 1000 = 62 \quad 841$$

$$6) 30827 \div 1000 = 30 \quad 827$$

$$7) 59456 \div 1000 = 59 \quad 456$$

$$8) 99999 \div 1000 = 99 \quad 99$$

Mental maths

Find the quotient and remainder without doing long division: —

$$1) 42 \div 10 = \frac{Q}{4} \quad \frac{R}{2}$$

$$2) 99 \div 10 = 9 \quad 9$$

$$3) 318 \div 10 = 31 \quad 8$$

$$4) 405 \div 10 = 40 \quad 5$$

$$5) 1350 \div 10 = 135 \quad 0$$

$$6) 4107 \div 10 = 410 \quad 7$$

$$7) 6781 \div 10 = 678 \quad 1$$

$$8) 9999 \div 10 = 999 \quad 9$$

Find the quotient and remainder without doing long division: (by 100)

$$1) 513 \div 100 = \frac{Q}{5} \quad \frac{R}{13}$$

$$2) 864 \div 100 = 8 \quad 64$$

$$3) 4109 \div 100 = 41 \quad 9$$

$$4) 3075 \div 100 = 30 \quad 75$$

Exercise - 1.2 Class - IV

A) Match the columns as shown:-

<u>Question:-</u>	<u>Rounds to:-</u>	<u>Division</u>	<u>Estimated Quotient</u>
$356 \div 27$	$200 \div 20$	$90 \div 4$	$\rightarrow 3$
$291 \div 36$	$300 \div 40$	$9 \div 3$	$\rightarrow 7$
$393 \div 24$	$900 \div 40$	$9 \div 4$	$\rightarrow 22$
$4315 \div 43$	$70 \div 30$	$19 \div 2$	$\rightarrow 2 \text{ (approx)}$
$5868 \div 37$	$90 \div 40$	$30 \div 4$	$\rightarrow 9$

B) Fill in the table and estimate the quotient:-

<u>Question</u>	<u>Rounds to</u>	<u>Division</u>	<u>Estimated Quotient:-</u>
1) $78 \div 18$	$80 \div 20$	$8 \div 2$	4
2) $64 \div 21$	$60 \div 20$	$6 \div 2$	3
3) $289 \div 69$	$300 \div 700$	$30 \div 7$	$\frac{30}{7}$
4) $753 \div 29$	$800 \div 30$	$80 \div 3$	$\frac{80}{3}$
5) $691 \div 51$	$700 \div 50$	$70 \div 5$	$\frac{70}{5}$

Exercise - 4.3

class - IV

A) Find the estimated quotient and the actual quotient :-

Question	Rounds To	Estimated quotient	Actual Quotient
1. $48 \div 28$	$50 \div 30$	$\frac{5}{3}$	$\frac{12}{7}$
2. $53 \div 25$	$50 \div 30$	$5/3$	$53/25 \rightarrow$
3. $74 \div 35$	$70 \div 40$	$7/4$	$74/35 \rightarrow$
4. $114 \div 25$	$100 \div 30$	$10/3$	$114/35 \rightarrow$
5. $201 \div 41$	$200 \div 40$	5	$201/41$

In this question to find the actual quotient and estimated quotient represent the division in fractional form.

ⓑ Divide to find the quotient and the remainder if any: —————

1) $92 \div 14$

$$\begin{array}{r} 6 \\ 14 \overline{) 92} \\ \underline{- 84} \\ 8 \end{array}$$

Quotient = 6

Remainder = 8

2) $89 \div 42$

$$\begin{array}{r} 2 \\ 42 \overline{) 89} \\ \underline{- 84} \\ 5 \end{array}$$

Quotient = 2

Remainder = 5

3) $82 \div 29$

$$\begin{array}{r} 2 \\ 29 \overline{) 82} \\ \underline{- 58} \\ 24 \end{array}$$

Quotient = 2

Remainder = 24

4) $95 \div 40$

$$\begin{array}{r} 2 \\ 40 \overline{) 95} \\ \underline{- 80} \\ 15 \end{array}$$

Quotient = 2

Remainder = 15

5) $97 \div 25$

$$\begin{array}{r} 3 \\ 25 \overline{) 97} \\ \underline{- 75} \\ 22 \end{array}$$

Quotient = 3

Remainder = 22

6) $63 \div 25$

$$\begin{array}{r} 2 \\ 25 \overline{) 63} \\ \underline{-50} \\ 13 \end{array}$$

Quotient = 2
Remainder = 13

7) $94 \div 23$

$$\begin{array}{r} 4 \\ 23 \overline{) 94} \\ \underline{-92} \\ 2 \end{array}$$

Quotient = 4
Remainder = 2

8) $85 \div 40$

$$\begin{array}{r} 2 \\ 40 \overline{) 85} \\ \underline{-80} \\ 5 \end{array}$$

Quotient = 2
Remainder = 5

9) $86 \div 43$

$$\begin{array}{r} 2 \\ 43 \overline{) 86} \\ \underline{-86} \\ 0 \end{array}$$

Quotient = 2
Remainder = 0

10) $93 \div 31$

$$\begin{array}{r} 3 \\ 31 \overline{) 93} \\ \underline{-93} \\ 0 \end{array}$$

Quotient = 3
Remainder = 0

11) $74 \div 24$

$$\begin{array}{r} 3 \\ 24 \overline{) 74} \\ \underline{-72} \\ 2 \end{array}$$

Quotient = 3
Remainder = 2

class - 10

12. $67 \div 56$

$$\begin{array}{r} 1 \\ 56 \overline{) 67} \\ \underline{- 56} \\ 11 \end{array}$$

Quotient = 1.
Remainder = 11.

13) $88 \div 61$

$$\begin{array}{r} 1 \\ 61 \overline{) 88} \\ \underline{- 61} \\ 27 \end{array}$$

Quotient = 1.
Remainder = 27.

14) $96 \div 71$

$$\begin{array}{r} 1 \\ 71 \overline{) 96} \\ \underline{- 71} \\ 25 \end{array}$$

Quotient = 1.
Remainder = 25.

15) $78 \div 27$

$$\begin{array}{r} 2 \\ 27 \overline{) 78} \\ \underline{- 54} \\ 24 \end{array}$$

Quotient = 2.
Remainder = 24.

16) $92 \div 38$

$$\begin{array}{r} 2 \\ 38 \overline{) 92} \\ \underline{- 76} \\ 16 \end{array}$$

Quotient = 2.
Remainder = 16.

class - TV
Divide to find the quotient and the remainder, if any:

1) $104 \div 21$

$$\begin{array}{r} 21 \overline{) 104} \\ \underline{- 84} \\ 20 \end{array}$$

Quotient = 4
Remainder = 20

2) $345 \div 42$

$$\begin{array}{r} 42 \overline{) 345} \\ \underline{- 336} \\ 9 \end{array}$$

Quotient = 8
Remainder = 9

3) $169 \div 27$

$$\begin{array}{r} 27 \overline{) 169} \\ \underline{- 162} \\ 7 \end{array}$$

Quotient = 6
Remainder = 7

4) $257 \div 35$

$$\begin{array}{r} 35 \overline{) 257} \\ \underline{- 245} \\ 12 \end{array}$$

Quotient = 7
Remainder = 12

5) $735 \div 81$

$$\begin{array}{r} 81 \overline{) 735} \\ \underline{- 729} \\ 6 \end{array}$$

Quotient = 9
Remainder = 6

6) $433 \div 44$

$$\begin{array}{r} 44 \overline{) 433} \\ \underline{- 396} \\ + 37 \end{array}$$

Quotient = 9
Remainder = 37

7) $460 \div 56$

class - IV

$$\begin{array}{r} 8 \\ 56 \overline{) 460} \\ \underline{- 448} \\ 12 \end{array}$$

Quotient = 8
Remainder = 12

8) $304 \div 62$

$$\begin{array}{r} 4 \\ 62 \overline{) 304} \\ \underline{- 248} \\ 56 \end{array}$$

Quotient = 4
Remainder = 56

9) $256 \div 37$

$$\begin{array}{r} 7 \\ 37 \overline{) 256} \\ \underline{- 259} \\ 18 \end{array}$$

Quotient = 7
Remainder = 18

10) $141 \div 18$

$$\begin{array}{r} 7 \\ 18 \overline{) 141} \\ \underline{- 126} \\ 15 \end{array}$$

Quotient = 7
Remainder = 15

11) $281 \div 38$

$$\begin{array}{r} 7 \\ 38 \overline{) 281} \\ \underline{- 266} \\ 15 \end{array}$$

Quotient = 7
Remainder = 15

12) $513 \div 45$

$$\begin{array}{r} 11 \\ 45 \overline{) 513} \\ \underline{- 495} \\ 18 \end{array}$$

Quotient = 11
Remainder = 18

13) $607 \div 38$

$$\begin{array}{r} 15 \\ 38 \overline{) 607} \\ \underline{- 570} \\ 227 \\ \underline{- 190} \\ 37 \end{array}$$

Quotient = 15
Remainder = 37

class - IV

14) $234 \div 57$

$$\begin{array}{r} 4 \\ 57 \overline{) 234} \\ \underline{- 228} \\ 6 \end{array} \quad \begin{array}{l} \text{Quotient} = 4 \\ \text{Remainder} = 6 \end{array}$$

15) $952 \div 82$

$$\begin{array}{r} 11 \\ 82 \overline{) 952} \\ \underline{- 82} \\ 132 \\ \underline{- 82} \\ 50 \end{array} \quad \begin{array}{l} \text{Quotient} = 11 \\ \text{Remainder} = 50 \end{array}$$

16) $904 \div 7$

$$\begin{array}{r} 129 \\ 7 \overline{) 904} \\ \underline{- 7} \\ 20 \\ \underline{- 14} \\ 64 \\ \underline{- 63} \\ 1 \end{array} \quad \begin{array}{l} \text{Quotient} = 129 \\ \text{Remainder} = 1 \end{array}$$

Nov 16, 2020