

CONTINUATION OF- EXERCISE 1.2

7. A merchant had Rs. 78,592 with her. She placed an order for purchasing 40 radio sets at Rs 1200 each. How much money will remain with her after the purchase?

SOLUTION

A merchant had Rs 78,592

Cost of 1 pen is Rs 1,200

Cost of 40 pens Rs 1,200 x 40= Rs 48,000

Amount left with merchant- Rs 78,592- Rs 48,000= Rs 30,592

8. A student multiplied 7,236 by 65 instead of multiplying by 56. By how much was his answer greater than the correct answer?

SOLUTION

The difference between multiplier is $65 - 56 = 09$

The product: $7,236 \times 9 = 65,124$

Ans . 65,124

9. To stitch a shirt , 2 m 15 cm cloth is needed. Out of 40 m cloth, how many shirts can be stitched and how much cloth will remain?

SOLUTION

1m = 100cm

40m = $100 \times 40 = 4000$ cm

2m= 200cm

Total = 200cm + 15cm= 215cm

No. of shirts could be stitched-

$$215 \mid 4000 \mid 18$$

$$\begin{array}{r} - \underline{215} \\ 1850 \\ - \underline{1720} \\ 130 \end{array}$$

18 shirts 130cm

$$1\text{cm} = 1/100\text{m}$$

$$130\text{cm} = 130/100 = 1.30 \text{ m}$$

Ans. 18 shirts and 1m 30 cm cloth left.

10. Medicine is packed in boxes, each weighing 4 kg 500g. How many such boxes can be loaded in a van which cannot carry beyond 800kg?

SOLUTION

Capacity of a van to carry load is 800kg

Weight of one medicine box is 4kg 500g

No. of boxes could be loaded in van-

$$1\text{kg} = 1000\text{g}$$

$$800\text{kg} = 800 \times 1000 = 800000\text{g}$$

$$4\text{kg} = 4 \times 1000 = 4000\text{g}$$

$$\text{Total } 4000\text{g} + 500\text{g} = 4500\text{g}$$

$$\text{No. of boxes} - \underline{800000}$$

$$4500$$

$$= \underline{8000}$$

45

$$45 \overline{) 8000} \overline{) 177}$$

$$- \underline{45}$$

350

$$- \underline{315}$$

350

Ans. 177 boxes.

$$- \underline{315}$$

50

11. The distance between the school and the house of a student's house is 1km 875m. Everyday she walks both ways. Find the total distance covered by her in six days.

SOLUTION

The distance between the school and the house is 1km 875m

The distance covered both ways is 1km 875m x 2= 3km 750m

Total distance covered in 6days 3km 750m x 6= 22km 500m

12. A vessel has 4 litres and 500 ml of curd. In how many glasses, each of 25 ml capacity , can it be filled?

SOLUTION

Total quantity of curd is 4 lit 500ml = 4500ml

Capacity of a vessel is 25ml

No. of glasses required to distribute 4500ml of curd

$$4500 \div 25 = 180 \text{ glasses}$$

Children copy down the sums neatly in pages, keep them safely to paste in your fair copy .

ESTIMATION

ESTIMATION IS TO FIND THE APPROXIMATE VALUE.

RULES FOR ESTIMATION-

Estimation to the nearest tens by rounding off-

The rule is- if the digit at ones place is less than 5 then the digit at tens place remains same but the ones place digit changes to zero. If the digit at ones place is 5 or greater than 5 then the tens place digit will be increased by one and ones place digit will be zero.

Example- 22 round off to nearest tens

22 lies between 20 and 30

20 22 30

Digit at ones place is $2 < 5$

Tens place digit will remain same and ones place digit will be written as 0 i.e. 20

So 22 will be round off to 20.

To round off 25 will be 30 as ones place digit is = 5

To round off 28 will be 30 as ones place digit is > 5

Estimating to the nearest hundreds by rounding off-

In this case the value of digit at tens place is important. If the digit at tens place is less than 5 then the given number is rounded off with the same digit at hundreds place, tens and ones place digit will be written as zero. If tens place digit is 5 or greater than 5 then the digit at hundreds place is increased by 1 but tens and ones place digits will be written as zero.

Example- To round off 225 to nearest hundred.

The round off number = 200 as the digit at tens place is

$$2 < 5.$$

To round off 278 to nearest hundred.

The round off number = 300 as the digit at tens place is

$$7 > 5.$$

Estimating to nearest thousands by rounding off-

In this case the digit at hundreds place is considered if it is less than 5 then thousands place digit will remain same and digits at hundreds, tens and ones place is written zero, but if it is 5 or greater than 5 then 1 is added to the digit at thousands place and rest places of the number will be zero.

Example – To round off 2,225 the underline digit will be considered i.e. hundred place digit it is less than 5 then the number will be rounded off as 2000.

To round off 2,567 the underline digit will be considered i.e. hundred place digit is equal to 5 then the round of number will be 3000.

EXERCISE 1.3

1. Estimate each of the following using general rule-

a. $730 + 998$

Round off the numbers to nearest hundred.

730 will be round off to 700 as digit at tens place is $3 < 5$.

998 will be round off to 1000 as digit at tens place is $9 > 5$

$$700 + 1000 = 1700.$$

b. $28,292 - 21,496$

Round off the numbers to nearest thousand.

28,292 will be rounded off to 28,000 as digit at hundred place is $2 < 5$.

21,496 will be round off to 21,000 as digit at hundred place is $4 < 5$

$$28,000 - 21,000 = 7,000.$$

SUMS FOR PRACTISE

c. $796 - 314$

d. $12,904 + 2,888$

2. Give a rough estimate (by rounding off to nearest hundreds) and also a closer estimate (by rounding off to nearest tens):

a. i. $439 + 334 + 4,317$ (by rounding off to nearest hundreds)

439 round off to 400

334 round off to 300

4,317 round off to 4300

$$400 + 300 + 4300 = 5000$$

ii. $439 + 334 + 4,317$ (by rounding off to nearest tens)

439 round off to 440

334 round off to 330

4,317 round off to 4,320

$$440 + 330 + 4,320 = 5,090$$

b. i. $4,89,348 - 48,365$ (rounding off to nearest hundreds)

$4,89,348$ round off to $4,89,300$

$48,365$ round off to $48,400$

$4,89,300 - 48,400 = 4,40,900$

ii. $4,89,348 - 48,365$ (rounding off to nearest tens)

$4,89,348$ round off to $4,89,350$

$48,365$ round off to $48,370$

$4,89,350 - 48,370 = 4,40,980$

SUMS FOR PRACTISE

c. $1,08,734 - 47,599$

d. $8325 - 491$

3. Estimate the following products using general rule-

a. 578×161 (rounding off to nearest hundred)

578 round off to 600

161 round off to 200

$600 \times 200 = 1,20,000$

b. 5281×3491 (rounding off to nearest thousand)

5281 round off to 5000

3491 round off to 3000

$5000 \times 3000 = 1,50,00,000$

SUMS FOR PRACTISE

c. 1291×592 hint round off the numbers to nearest hundreds

d. 9250×29 hint round off the numbers to nearest tens.