

CHAPTER – 1

Knowing Our Numbers

EXERCISE 1.2

Q. 1

A book exhibition was held for four days in a school. The number of tickets sold at the counter on the first, second, third and final day was respectively 1094, 1812, 2050 and 2751. Find the total number of tickets sold on all the four days.

Answer:

Tickets sold on the first day of exhibition = 1094

Tickets sold on the second day of the exhibition = 1812

Tickets sold on the third day of the exhibition = 2050

Tickets sold on the last day of the exhibition = 2751

Now,

To get total number of tickets we, add the all above tickets sold,

By adding we get,

$$= 1094 + 1812 + 2050 + 2751$$

$$= 7707$$

So, total tickets sold = 7,707

Q. 2

Shekhar is a famous cricket player. He has so far scored 6980 runs in test matches. He wishes to complete 10,000 runs. How many more runs does he need?

Answer:

The number of runs scored by Shekhar so far = 6980

The number of runs shekhar wants to score = 10,000

Thus, the number of runs required = $10,000 - 6980$
= 3020 runs

So,

Shekhar required 3,020 more runs to complete his 10,000 runs.

Q.3

In an election, the successful candidate registered 5,77,500 votes and his nearest rival secured 3,48,700 votes. By what margin did the successful candidate win the election?

Answer:

Successful candidate secured = 5, 77,500 votes

Rival candidate secured = 3, 48,700 votes

$$\begin{aligned}\text{The margin} &= 5,77,500 - 3,48,700 \\ &= 2,28,800 \text{ votes}\end{aligned}$$

The successful candidate has won the election by the margin of 2, 28,800 votes.

Q.4

Kirti bookstore sold books worth Rs. 2,85,891 in the first week of June and books worth Rs. 4,00,768 in the second week of the month. How much was the sale for the two weeks together? In which week was the sale greater and by how much?

Answer:

Value of books sold in the first week = Rs 2, 85,891

Value of books sold in the second week = Rs 4, 00,768

Total sale in the two weeks = sale in the first week + sale in the second week

$$\begin{aligned}\text{Total sale for the two weeks} &= 2,85,891 + 4,00,768 = \\ &6,86,659\end{aligned}$$

Clearly, from the sales figures, we can say that the Sales in the second week is greater than the first week.

$$\text{Difference} = 4,00,768 - 2,85,891 = 1,14,877$$

The amount by which the Sale in the second week is higher than the sale in the first week by Rs 1, 14,877.

Q. 5

Find the difference between the greatest and the least number that can be written using the digits 6, 2, 7, 4 and 3 each only once.

Answer:

Trick: To find the greatest number arrange the given numbers in descending order and to get the smallest number, arrange the given digits in ascending order.

On using the digits: 6, 2, 7, 4 and 3 and only once, we get,

Greatest number = 76432

Smallest number = 23467

Now, the difference between the greatest and the least number = $76432 - 23467$
 $= 52965$

Q.6

A machine, on an average, manufactures 2,825 screws a day. How many screws did it produce in the month of January 2006?

Answer:

Screws produced by machine in one day = 2, 825

Days in January = 31 days

Screws produced in 31 days = $2,825 \times 31$
 $= 87575$ screws

So,

Screws produced in January 2006 = 87575

Q. 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?

Answer:

Total money merchant has = 78,592 Rs

Cost of one radio set = 1200 Rs

Cost of 40 radio sets = $1200 \times 40 = 48000$ Rs

So,

Total money spent on radio sets = 48,000 Rs

Money left with the merchant = $78,592 - 48,000 = 30,592$ Rs

Therefore, total money left with her is 30,592 Rs after the purchase.

Q.8

A student multiplied 7236 by 65 instead of multiplying by 56. By how much was his answer greater than the correct answer?

Answer:

The Student multiplied 7236 by 65 instead of 56;

He gets, a wrong answer = $7236 \times 65 = 470340$

But, the right answer he should have got = $7236 \times 56 = 405216$

Now the difference in the answers = $470340 - 405216 = 65124$

So,

His answer was greater than the right answer by 65124.

Q. 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?

Answer:

We know, $1 \text{ m} = 100\text{cm}$

Therefore, $2 \text{ m } 15 \text{ cm} = 215\text{cm}$

$40 \text{ m} = 40 \times 100 \text{ cm} = 4000 \text{ cm}$

Now the cloth required for one shirt = 215 cm

Number of shirts that can be stitched out of the 4000cm =
 $4000 \div 215$

$$\begin{array}{r} 18 \\ 215 \overline{)4000} \\ \underline{215} \\ 1850 \\ \underline{1720} \\ 130 \end{array}$$

Therefore, 18 shirts can be made from 4000cm long cloth.
Out of 4000 cm, 130cm cloth will remain which is 1m 30cm.

Q.10

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

Answer:

We know, 1 kg = 1000g

Thus, 4 kg 500g = 4500g

And, 800 kg = $800 \times 1000 = 8,00,000$ g

Weight of one box = 4500g

The total weight that can be carried by van = 8,00,000 g

Thus, the number of boxes that can be loaded in the van =
 $800000 \div 4500$

$$\begin{array}{r} 177 \\ 4500 \overline{) 800000} \\ \underline{4500} \\ 35000 \\ \underline{31500} \\ 35000 \\ \underline{31500} \\ 3500 \\ \underline{3500} \\ 0 \end{array}$$

Hence, 177 boxes can be loaded in the van.

Q. 11

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

Answer:

Distance between the school and her house = 1km 875m

$$1 \text{ km} = 1000\text{m}$$

$$1\text{km } 875\text{m} = 1875\text{m}$$

The distance she covered each day = $1875 \times 2 \times 6$

$$\begin{array}{r} 111 \\ 1875 \\ \times 12 \\ \hline 11 \\ 13750 \\ 1875 \times \\ \hline 22,500 \end{array}$$

$$= 22500 \text{ m}$$

Therefore, distance covered in 6 days = 22,500m which is 22.5 km or we can say 22km 500m.

Q. 12

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

Answer:

Capacity of vessel = 4 l 500ml

$$1 \text{ l} = 1000 \text{ ml}$$

$$4 \text{ l } 500 \text{ ml} = 4500 \text{ ml}$$

Capacity of a glass = 25 ml

Number of glasses required to fill the vessel = $4500 \div 25$

$$\begin{array}{r} 180 \\ 25 \overline{) 4500} \\ \underline{25} \\ 200 \\ \underline{200} \\ \times \end{array}$$

So,

180 glasses needed to fill the vessel.