EXERCISE 1.2 PAGE NO: 16

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 four days.

Solutions:

Number of tickets sold on 1st day = 1094

Number of tickets sold on 2nd day = 1812

Number of tickets sold on 3rd day = 2050

Number of tickets sold on 4th day = 2751

Hence, the total number of tickets sold on all four days = 1094 + 1812 + 2050 + 2751 = 7707 tickets

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?

Solutions:

Shekhar scored = 6980 runs

He wants to complete = 10000 runs

Runs needed to score more = 10000 – 6980 = 3020

Hence, he needs 3020 more runs to score

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?

Solutions:

No. of votes secured by the successful candidate = 577500

No. of votes secured by his rival = 348700

Margin by which he won the election = 577500 – 348700 = 228800 votes

∴ The successful candidate won the election by 228800 votes

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?

Solutions:

Price of books sold in the first week of June = Rs 285891

Price of books sold in the second week of June = Rs 400768

No. of books sold in both weeks together = Rs 285891 + Rs 400768 = Rs 686659

The sale of books is the highest in the second week.

Difference in the sale in both weeks = Rs 400768 – Rs 285891 = Rs 114877

∴ Sale in the second week was greater by Rs 114877 than in the first week.

5. Find the difference between the greatest and the least 5-digit number that can be written using the digits 6, 2, 7, 4, and 3 each only once.

Solutions:

Digits given are 6, 2, 7, 4, 3

Greatest 5-digit number = 76432

Least 5-digit number = 23467

Difference between the two numbers = 76432 – 23467 = 52965

∴ The difference between the two numbers is 52965.

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

Solutions:

Number of screws manufactured in a day = 2825

Since January month has 31 days,

The number of screws manufactured in January = 31 × 2825 = 87575

Hence, the machine produced 87575 screws in the month of January 2006.

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?

Solutions:

Total money the merchant had = Rs 78592

The number of radio sets she placed an order for purchasing = 40 radio sets

Cost of each radio set = Rs 1200

So, cost of 40 radio sets = Rs 1200 × 40 = Rs 48000

Money left with the merchant = Rs 78592 – Rs 48000 = Rs 30592

Hence, money left with the merchant after purchasing radio sets is Rs 30592.

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

Solutions:

Difference between 65 and 56, i.e. (65 – 56) = 9

The difference between the correct and incorrect answer = 7236 × 9 = 65124

Hence, by 65124, the answer was greater than the correct answer.

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?

Solutions:

Given

The total length of the cloth = 40 m

= 40 × 100 cm = 4000 cm

Cloth required to stitch one shirt = 2 m 15 cm

= 2 × 100 + 15 cm = 215 cm

Number of shirts that can be stitched out of 4000 cm = 4000/215 = 18 shirts

Hence, 18 shirts can be stitched out of 40 m, and 1 m 30 cm of cloth is 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 800 kg?

Solutions:

Weight of one box = 4 kg 500 g = 4 × 1000 + 500

= 4500 g

Maximum weight carried by the van = 800 kg = 800 × 1000

= 800000 g

Hence, the number of boxes that can be loaded in the van = 800000/4500 = 177 boxes

11. The distance between the school and 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.

Solutions:

Distance covered between the school and her house = 1 km 875 m = 1000 + 875 = 1875 m

Since the student walks both ways,

The distance travelled by the student in one day = 2 × 1875 = 3750 m

Distance travelled by the student in 6 days = 3750 m × 6 = 22500 m = 22 km 500 m

∴ The total distance covered by the student in six days is 22 km and 500 m.

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

Solutions:

Quantity of curd in the vessel = 4 l 500 ml = 4 × 1000 + 500 = 4500 ml

Capacity of 1 glass = 25 ml

∴ Number of glasses that can be filled with curd = 4500 / 25 = 180 glasses

Hence, 180 glasses can be filled with curd.