

Exercise 1.5

Q.1 How many milligrams make one kilogram?

Sol: As, $1 \text{ kg} = 1000 \text{ gram}$

also $1 \text{ gram} = 1000 \text{ milligram}$.

$$\therefore 1 \text{ kg} = 1000 \times 1000$$

$$= 1,000,000 \text{ mg}$$

= Ten lakh mg makes one kg.

Q.2 A box of Medicine tablets contains 2,00,000 tablets each weighing 20 mg. What is the total weight of all tablets in the box in grams? In kilograms?

Sol: Total Tablets = 2,00,000

Weight of each tablet = 20 mg

$$\therefore \text{Total weight} = 2,00,000 \times 20 \text{ mg}$$

$$= 40,00,000 \text{ mg}$$

As, $1 \text{ g} = 1000 \text{ mg}$

$$\therefore \text{Total weight of tablets} = \frac{40,00,000}{1000}$$

(In gram) $= 4000 \text{ gram}$

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

$$= \frac{4000}{1000} = 4 \text{ Kg}$$

Q.3 Population of Sundarnagar was 2,35,471 in the year 1991. In the year 2001 it was found to have increased by 72,958. What was the population of the city in 2001.

Sol: Population in 1991 = 2,35,471

Population increased = 72,958.

$$\begin{array}{r} \therefore \text{Population in 2001} = 2,35,471 \\ + \quad 72,958 \\ \hline 3,08,429 \end{array}$$

$\therefore$ Population in 2001 will be 3,08,429.

Q.4 A book exhibition was held for four days in a school. The number of tickets sold at the counter on first, second, third and final days were respectively 1094, 1812, 2050 and 2751. Find the total number of tickets sold on all four days.

Sol Number of tickets sold on first day = 1094

Second day = 1812

Third day = 2050

Final day = 2751

Total tickets sold = 7707

Q.5 The town news paper is published every day. one copy has 12 pages. Everyday 11,980 copies are printed. How many pages are in all printed every day? Every Month?

Sol: Number of pages in one copy = 12
Number of copies printed per day = 11980

$$\therefore \text{No. of Pages Printed per day} = 11980$$

$$\begin{array}{r} \times 12 \\ \hline 143760 \end{array}$$

$\therefore$ 1,43,760 pages printed per day.

Now no. of pages printed every month

$$= 1,43,760$$

$$\begin{array}{r} \times 30 \\ \hline 43,12,800 \end{array}$$

Q.6 A machine, on an average, manufactures 2825 screws a day. How many screws did it produce in the month of January 2006?

Sol: Number of screws produced a day = 2825
No. of days in January = 31

$$\therefore \text{Total screws produced} = 2825$$

$$\begin{array}{r} \times 31 \\ \hline 87,575 \end{array}$$

Q.7 A famous cricketer has so far scored 6978 runs in test matches. He wishes to complete 10,000 runs. How many more runs does he need?

Sol: Runs Scored = 6978

Runs wish to score = 10,000

$$\therefore \text{More runs needed} = \begin{array}{r} 10,000 \\ - 6978 \\ \hline 3022 \end{array}$$

$\therefore$ 3022 More runs needed.

Q.8 Ravish has Rs. 78,592 with him. He placed an order for purchasing 39 radio set at ₹ 1234 each. How many money will remain with him after the purchase?

Sol: Total Money Ravish has = ₹ 78,592

$$\begin{array}{r} \text{Cost of 39 radio set} = 1234 \\ \times 39 \\ \hline 48,126 \end{array}$$

$$\begin{array}{r} \text{Amount left with Ravi} = 78,592 \\ - 48,126 \\ \hline 30,466 \end{array}$$

$\therefore$ Ravish has money left = ₹ 30,466.

Q.9 In an election, the successful candidate registered 5,77,570 and his nearest rival secured 3,48,685 votes. By what margin did the successful candidate win the election?

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Sol: Successful Candidate got votes = 5,77,570
 Rival got = 3,48,685

$$\therefore \text{Margin of winning} = \begin{array}{r} 577570 \\ - 348685 \\ \hline 228885 \end{array}$$

$\therefore$ election won by 2,28,885 votes.

Q.10 To stitch a shirt 2m 15cm cloth is needed, out of 40m cloth, how many shirts can be stitched and how much cloth will remain?

Sol: Length of cloth = 40m = $40 \times 100 = 4000$ cm
 Length of cloth needed for 1 shirt = 2m 15cm
 $= 200 + 15 = 215$ cm

$$\therefore \text{No. of shirts stitched} = 4000 \div 215 \\ = 18.60 \text{ shirts.}$$

$\therefore$ Number of shirts can be only in whole no. therefore 18 shirts can be stitched.

$$\text{Cloth required for 18 shirts} = (215 \times 18) \text{ cm} \\ = 3870 \text{ cm.}$$

$$\text{So, Cloth remains} = 4000 - 3870 \\ = 130 \text{ cm or } \frac{130}{100} \text{ m} \\ = 1.3 \text{ m.}$$

$\therefore$ 18 shirts can be stitched and 1m 30cm cloth remains.

Q.11 A vessel has 4 litre and 650 ml of curd.
In how many glasses, each of 25 ml capacity, can it be distributed?

Sol: Volume of curd = 4 litre 650 ml
 $= 4000 + 650 = 4650 \text{ ml}$

Capacity of glass = 25 ml

$\therefore$ No. of glasses = $4650 \div 25$
 $= 186 \text{ glasses.}$

Q.12 Medicine is packed in boxes, each such box weighing 4 kg 500 g. How many such boxes can be loaded in a van which can not carry beyond 800 kg.?

Sol: Weight of each box = 4 kg 500 g
 $= 4000 + 500 = 4500 \text{ g.}$

Weight can carry by van = 800 kg
 $= 800 \times 1000 \text{ g}$
 $= 800000 \text{ gram.}$

$\therefore$ No. of boxes carried by van = $\frac{800000}{4500}$
 $= 177.77 \text{ (Approx).}$

$\therefore$ Van can carry 177 complete boxes.

Q.13 The distance between the school and the house of a student is 1 km 875 m. Everyday she walks both ways between her school and home. Find the total distance covered by her in a week?

Sol: Distance covered to go to school = 1 km 875 m
 $= 1000 + 875$
 $= 1875 \text{ m}$

Per day distance covered = $(2 \times 1875) \text{ m}$
 $= 3750 \text{ m}$

$\therefore$ Distance covered in a week = $(7 \times 3750) \text{ m}$
 $= 26250 \text{ m}$
 $= 26 \text{ km } 250 \text{ m.}$
