Day 1 Dec 2020

Chapter - 15 (Holding Capacity)

Ex - 15.1

Q1. Radha poured _____ thermos?

Sol. Total amount of water pours by Radha in thermos
⇒ 500 ml + 200 ml + 100 ml ⇒ 800 ml
Thermos is half filled on pouring 800 ml water in it.
then water used to fill thermos completely
⇒ 800 + 800 ⇒ 1600 ml
Therefore capacity of thermos is 1600 ml.

Q2. In a small _____ such bottles?

Sol. Capacity of a small can / bottel of kerosine ⇒ 3 L
Amount of kerosene required to fill 8 bottles
⇒ 8 × 3 ⇒ 24 L.
Amount of kerosene required = 24 L.

Q3. How many _____ milk?

Sol. Amount of milk = 10 L. = 10 × 1000 = 10000 ml
capacity of 1 packet = 250 ml
No. of packets ⇒ 10000 ÷ 250

$$250 \overline{)\,10000\,} \quad 40$$
$$= 1000$$
$$00$$

Therefore, 40 packets of 250 ml of milk can be packed in 10 L of milk.

Day 2 Dec 2020

Ex 15.1

Q4. In a drum _____ poured?

Sol. Total amount / capacity of drum = 200 Liter
Total capacity of drum filled in 10 drums of 5 L
=) 5 × 10 = 50 L
Total capacity of drum filled in 20 bottles of 3 L
=) 20 × 3 =) 60 L
Total capacity of drum filled in 15 bottles of 2 L
=) 15 × 2 = 30 L.
Therefore, total amount of oil filled
=) 50 L + 60 L + 30 L =) 140 L.
Remaining oil = 200 L - 140 L =) 60 L.
Remaining oil can be filled in drum of 1 L.
Therefore, number of drums filled in 60 L oil = 60.

Q5. Fill in the blanks

(i) In $1\frac{1}{2}$ L. 500 ml holding 3 pots can be filled

Sol. =) $1\frac{1}{2}$ L = $\frac{3}{2} \times \frac{500}{1000}$ =) $\frac{1500}{3}$ mL = 500 ml

(ii) By taking 500 ml 2 times 1 liter pot can be filled.

500 + 500 =) 1000 mL

(iii) At the rate of ₹ 40 per liter, the value of 250 ml milk is ₹ 90.

Sol. 2.250ml × 40 = ₹ 90

(1) (2)

2.250
× 40
0000
9000×
90.000

(iv) 1000 mm is equal to 1 liter.

Q6.

Sol. Above tap fills in 1 hour = 25 l. water
Above tap fills in 4 hour = 25 × 4 = 100 l. water
Again, bottom tap in 1 hour = 10 l water
Bottom tap in 4 hour = 10 × 4 = 40 l. water
Amount of water in tank after 4 hour.
100 - 40 = 60 l.
Therefore the amount of water in a tat tank after 4 hour = 60 l.

4 Dec 2020

Ex 15.1

Q7. Ramesh has ____ used?

Sol Capacity of tank ⇒ 600 liter
water used in a day = 20 buckets
Capacity of 1 bucket = 10 liter
Capacity of 20 buckets = 20 × 10 = 200 liter

Number of days ⇒ Capacity of water tank / used water in a day

⇒ $\frac{600}{200}$ = 3 Days.

Q8.

Sol given - first tap fill the tank in 2 hours
in one hour first tap fill half tank = $\frac{1}{2}$

given ⇒ Second tap empty the tank in 4 hours
in one hour second tap empty = $\frac{1}{4}$

So 1 hour position of tank = $\frac{1}{2} - \frac{1}{4}$

⇒ $\frac{2-1}{4} = \frac{1}{4}$

Ex 21.15.2

Q1 Convert $3\frac{1}{2}$ km into m.

Sol 1 km = 1000 m

$\Rightarrow 3\frac{1}{2} = \frac{7}{2} \times \frac{500}{1000}$

$\Rightarrow$ 3500 meter.

Q2. Convert 6500 gm into Kilogram.

Sol 1000 gm is equal to 1kg

$\Rightarrow \frac{6500}{1000} = 6.5\,kg$

Q3. Convert 2250 mm into liter.

Sol 1000 mm = 1 liter

$\frac{2250}{1000} = 2.25$ liter.

Day 5 Dec 2020 Ex 15.2

Q4. Convert 18000 ml into liter.

Sol 1000 ml = 1 liter

$18000\ ml = \frac{18000}{1000} = 18$ liter.

Q5. Convert 75000 gm into kg.

Sol 1000 gm = 1 kg.

$\Rightarrow \frac{75000}{1000} = 75$ kg.

Q6. Convert 2.5 liter into ml.

Sol 1 liter = 1000 mL

$2.5 \times 1000 = 2500$ ml.

1000
× 2.5
5000
20000
25000

Q7. Convert $1\frac{1}{2}$ kg into gram.

Sol $1\frac{1}{2} \Rightarrow \frac{3}{2}$ kg

1 kg = 1000 g

$\frac{3}{2} \times 1000^{500} = 1500$ gram.

Q8. Convert 3 meter into milimeter.

Sol 1 m = 1000 mm.

3 × 1000 = 3000 mm.

Q9. How many drum _____ liter?

Sol Total capacity of tank = 5000 liter.
Capacity of 1 drum => 20 liter
Number of drum => $\frac{5000}{20} = 250$

Q10. ~~Tot~~ The holdings _____ drum?

Sol Total capacity of a drum = 3750 liter.
Capacity of a box = 15 liter.
Number of boxes => $\frac{3750}{15}$ => 250

Q11. The holding _____ 48 boxes?

Sol Capacity of 1 box = 13kg 500g.
Capacity of 48 boxes => 13.500 x 48 = 648kg.

kg	g
13	500
x	48
108	000
540	00x
648	000

Capacity of 48 boxes = 648kg.

Q12. Holding capacity _____ Container?

Ans Capacity of 1 container = 15 liter.
Capacity of 15 containers ⇒ 15 × 15
225 liter.

15
×15
75
15×
225

Q13. The weight of _____ bottles.

Sol. Weight of 1 oil bottle = 1kg 750 gm
weight of 20 bottles = 1. 750 × 20 = 35kg.

kg	g
1	750
×	20
0	000
35	00×
35	000

Q14. Convert 5 liter 750 ml into mm.

Sol 1 liter = 1000 mm
5 × 1000 = 5000 + 750 = 5750 mm.

Q15. Convert $2\frac{3}{4}$ Km into meter.

Sol 1 Km = 1000 m

$2\frac{3}{4} = \frac{11}{4} \times 1000^{250} \Rightarrow 2750$ m.