Exercise 2B

solution 07

Answer :

Capacity of 1 tin = $12\frac{3}{4}\ \mathbf{L} = \frac{51}{4}\ \mathbf{L}$

$\therefore$ Capacity of 26 such tins = $\left(26 \times \frac{51}{4}\right)\mathbf{L}$

$= \left(\frac{26}{1} \times \frac{51}{4}\right)\mathbf{L} = \left(\frac{26\times51}{1\times4}\right)\mathbf{L} = \left(\frac{13\times51}{1\times2}\right)\mathbf{L} = \left(\frac{663}{2}\right)\mathbf{L} = 331\frac{1}{2}\ \mathbf{L}$

Hence, 26 such tins can hold $331\frac{1}{2}$ L of oil.

solution 08

Answer :

Cost of 1 ticket = Rs $35\frac{1}{2}$ = Rs $\frac{71}{2}$

$\therefore$ Cost of 308 tickets = Rs $\left(\frac{71}{2} \times 308\right) = \mathbf{Rs}\ \left(\frac{71}{2} \times \frac{308}{1}\right) = \mathbf{Rs}\ \left(71 \times 154\right) = \mathbf{Rs}\ 10934$

Hence, 308 tickets were sold for Rs 10,934.

solution 09

Answer :

Thickness of 1 board = $3\frac{2}{3}$ cm

$\therefore$ Thickness of 9 boards = $\left(9 \times 3\frac{2}{3}\right)\ \mathbf{cm}$

$= \left(\frac{9}{1} \times \frac{11}{3}\right)\ \mathbf{cm}$ = (3 × 11) cm = 33 cm

Hence, the height of the stack is 33 cm.

solution 10

Answer :

Time taken by Rohit to complete one round of the circular park = $4\frac{4}{5}$ min = $\frac{24}{5}$ min

∴ Time taken to complete 15 rounds = $\left(15 \times \frac{24}{5}\right)$ min

= (3 × 24) min

= 72 min

= 1 h 12 min [∵ 1 hr = 60 min]

Hence, Rohit will take 1 h 12 min to make 15 complete rounds of the circular park.

solution 11

Answer :

Weight of Amit = 35 kg

Weight of Kavita = $\frac{3}{5}$ of Amit's weight

= 35 kg x $\frac{3}{5}$ = $\left(35 \times \frac{3}{5}\right)\mathbf{kg} = \left(7 \times 3\right)\ \mathbf{kg} = 21\ \mathbf{kg}$

Hence, Kavita's weight is 21 kg.

solution 12

Answer :

Number of boys in the class = $\frac{5}{7}$ of the total no. of students

= $\frac{5}{7}$ × 42 = $\left(\frac{5\times42}{7}\right) = 5 \times 6 = 30$

∴ Number of girls in the class = 42 − 30 = 12

Hence, there are 12 girls in the class.

********** END **********