Exercise 9C

Q1

Answer :

(c) 45.6 kg

Weight of the rod of length 4.5 m = 17.1 kg

Weight of the rod of length 1 m = $\frac{17.1}{4.5}$ kg   [less length, less weight]

∴ Weight of the rod of length 12 m = $\frac{17.1}{4.5} \times 12$ = 45.6 kg   [more length, more weight]

Q2

Answer :

(d) none of these

0.8 cm represents 8.8 km.

1 cm represents $\frac{8.8}{0.8}$ km.

80.5 cm represents $\frac{8.8}{0.8} \times 80.5$ = 885.5 km.

Q3

Answer :

Distance covered in 20 min = 5 km

Distance covered in 1 min = $\frac{5}{20}$ km   [less time, less distance covered]

Distance covered in 50 min = $\frac{5}{20} \times 50$ = 12.5 km   [more time, more distance covered]

Hence, Raghu will cover a distance of 12.5 km in 50 minutes.

Thus, the correct option is (c).

Q4

Answer :

Number of days for which 500 men have enough food = 24

Number of days for which 1 man has enough food = 24 × 500   [less men, more food]

Number of days for which 800 men have enough food = $\frac{24 \times 500}{800}$ = 15   [more men, less food]

Hence, the food will last for 15 days after the reinforcement of 300 men.

Thus, the correct option is (d).

Q5

Answer :

Time taken to fill $\frac{4}{5}$ of a cistern = 1 min

Time taken to fill 1 cistern $= \frac{5}{4}$ min

Time taken to fill $\frac{1}{5}$ of a cistern $= \frac{5}{4} \times \frac{1}{5} = \frac{1}{4}$ min = 15 seconds

Hence, it will take 15 seconds to fill the rest of the cistern.

Thus, the correct option is (b).

Q6

Answer :

Number of cows that eat as much as 15 buffaloes = 21

Number of cows that eat as much as 1 Buffalo = $\frac{21}{15}$

Number of cows that eat as much as 35 buffaloes = $\frac{21}{15} \times 35$ = 49

Hence, 49 cows will eat as much as 35 buffaloes.

Thus, the correct option is (a).

Q7

Answer :

(b) 75 m

Height of the tree that casts a 4 m long shadow = 6 m

Height of the tree that casts a 1 m long shadow = $\frac{6}{4}$ m

∴ Height of the flag pole that casts a 50 m long shadow = $\frac{6}{4} \times 50$ = 75 m

Q8

Answer :

8 men finish the work in 40 days.

1 man can finish the work in 8×40 days.   [Less men, more days]

10 men can finish the work in $\frac{8 \times 40}{10}$ = 32 days.   [More men, less days]

∴ If 2 more men join them, the work will be completed in 32 days.

The correct option is (b).

Q9

Answer :

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