Exercise - 10.1 Unitary Method. VII

Solution 1:-

Given that,

cost of 20 chocolates = Rs 320.

∴ Cost of one chocolate = $\frac{320}{20}$

= Rs. 16.

Hence, cost of 35 chocolates = Rs $\left(\frac{320}{20} \times 35\right)$

= $\frac{320}{4} \times 7$

= 80×7

= Rs 560.

Solution-2 :-

We have,

cost of 40 meters of cloth = Rs 200 (200)

cost of one meter cloth = $\frac{200}{40}$

= Rs 5.

∴ Hence, cost of 50 meters of cloth = $\frac{200}{40} \times 50$

= Rs. 250.

Solution-03 :-

It is given that.

With 36 litres of petrol the car goes 522km.

∴ With 1 Litre of petrol the car goes $\frac{522}{36}$ km

Hence, with 14 Litres of petrol it would go

$$\left(\frac{522}{36} \times 14\right) km = \frac{522}{18} \times 7 = 29 \times 7 \text{ km}$$

$$= 203 \text{ km}.$$

Solution-04 :-

It is given that,

Travelling 900km by rail costs Rs. 280

∴ Fare for the journey of 360km $= \frac{280}{900} \times 360$

$$= \frac{280 \times 4}{10}$$

$$= \frac{1120}{10}$$

$$= \text{Rs. } 112.$$

Solution-05 :-

It is given that.

6 oil tankers can be filled by a pipe in $4\frac{1}{2}$ hours,

∴ 4 oil tankers can be filled by a pipe $= \frac{\frac{9}{2}}{6} \times 4$

$$= \frac{36}{12} = 3 \text{ hours}.$$

Solution -06 :-

$\frac{3}{4}$ of salary per month is RS 600 =

0.75 of salary per month is 600

$\frac{3}{4}$ of salary per month = 600.

Salary per day = $\frac{600}{30} = 20$.

Salary per month = $\frac{600 \times 4}{3}$ [$\frac{3}{4}$ Salary = 600]

= RS. 800.

Solution -07 :-

The cost of 32 tables = RS 23520.

cost of one table = $\frac{23520}{32}$

= $\frac{1470}{2}$

= RS 735

Number of such tables for RS 51450 = $\frac{51450}{735}$

= 70

∴ 70 such tables can be purchased by RS. 51450.

Solution-08:-

The yield of wheat from 6 hectares = 280 quintals.

yield of wheat from one hectare = $\frac{280}{6}$

$= \frac{140}{3}$.

The yield of wheat from x hectares = $\frac{225 \text{ quintals}}{\frac{140}{3}}$

$= \frac{3 \times 225}{140}$

$= 4.8214$.

Solution-09:-

Fifteen postcards cost = RS 2.25.

cost of postcard cost = RS $\frac{2.25}{15}$

$= 0.15$

$= RS 0.15$

cost of 36 post cards $= 36 \times 0.15$

$= RS\ 5.40$.

$\because$ cost = RS.45 for x cards.

$x = \frac{45}{0.15}$

$= 300$ Post cards.

Solution-10:-

Rail journey of 75 km costs Rs 215.

$$\text{One km cost} = \frac{215}{75}$$

$$120 \text{ km cost} = \frac{215}{75} \times 120$$

$$\text{cost per 120 km} = \frac{215 \times 8}{5}$$

$$= \text{Rs. } 344.$$

Solution-11:-

It is given that,

Sales tax on a purchase worth Rs 60 is Rs 4.20.

$$\text{Sales tax on a purchase worth Rs 1} = \frac{4.20}{60}$$

$$= 0.07.$$

Sales tax on a purchase worth Rs 150 $= 0.07 \times 150$

$= \text{Rs } 10.50$

Solution-12:

It is given that,

52 packets of 12 pencils each cost = Rs 499.20.

$$\text{Packet cost} = \frac{499.20}{52} = 9.6$$

$$\text{Pencil cost} = \frac{9.6}{12} = 0.8.$$

65 packets of 10 pencils each $= 65 \times 10$ pencils $= 650$ p

cost of 65 packets $= 650 \times 0.8$

$= \text{Rs. } 520.$