## EXERCISE 13(B)

**Question 1.**
Weight of 15 books is 6 kg. What is the weight of 45 such books?
**Solution:**
Weight of 15 books = 6 kg
Weight of 1 book = $\frac{6}{15}$ kg
Weight of 45 such books = $\frac{15}{6}$ x 45 = 112.5 kg

**Question 2.**
A made 84 runs in 6 overs and B made 126 runs in 7 overs. Who made more runs per over?
**Solution:**
Runs scored by A in 6 overs = 84 runs
Runs scored by A in one over = $\frac{84}{6}$ = 14 runs
Runs scored by B in 7 overs = 126 runs
Runs scored by B in one over = $\frac{126}{7}$ = 18 runs
B score more runs per over than A.



**Question 3.**
Geeta types 108 words in 6 minutes. How many words would she type in half an hour?
**Solution:**
Words typed by Geeta in 6 minutes = 108
Words typed by Geeta in 1 minute = $\frac{108}{6}$
Words typed by Geeta in half hour or 30 minutes = $\frac{108}{6}$ x 30 = 540 words

**Question 4.**
The temperature dropped 18 degree Celsius in the last 24 days. If the rate of temperature drop remains the same, how many degrees will the temperature drop in the

next 18 days?

**Solution:**

The temperature drop in last 24 days = 18°C

The temperature drop in last 1 day = $\frac{18°C}{24}$

The temperature drop in 18 days

$$= \frac{18°C}{24} \times 18 = 13.5° C$$

**Question 5.**

Mr. Chopra pays ₹ 12,000 as rent for 3 months. How much does he has to pay for a year if the rent per month remains same?

**Solution:**

Rent for 3 months = ₹12000

Rent for 1 month = ₹ $\frac{12000}{3}$

Rent for 1 year (or 12 months)

$= ₹ \frac{12000}{3} \times 12 = ₹48000$



**Question 6.**

A truck requires 108 litres of diesel for covering a distance of 1188 km. How much diesel will be required by the truck to cover a distance of 3300 km?

**Solution:**

Diesel required to cover a distance of 1188 km = 108 litres

Diesel required to cover a distance of 1 km = $\frac{108}{1188}$ litres

Diesel required to cover a distance 3300 km = $\frac{108}{1188} \times 3300$

= 300 litres

**Question 7.**
If a deposit of ₹ 2,000 earns an interest of ₹ 500 in 3 years, how much interest would a deposit of ₹ 36,000 earn in 3 years with the same rate of simple interest?
**Solution:**

Interest earned on deposit of ₹2000 for 3 months = ₹500

Interest earned on deposit of ₹1 for 3 months = $₹ \frac{500}{2000}$

Interest earned on deposit of ₹36000 for 3 months = $₹ \frac{500}{2000} \times 36000 = ₹9000$



**Question 8.**
If John walks 250 steps to cover a distance of 200 metres, find the distance covered by him in 350 steps.
**Solution:**
Distance covered with 250 steps = 200 m
Distance covered with 1 step = $\frac{200}{250}$ m
Distance covered with 350 steps = $\frac{200}{250}$ x 350 = 280 m

**Question 9.**
25 metres of cloth costs ₹ 1,012.50.
(i) What will be the cost of 20 metres of cloth of the same type?
(ii) How many metres of the same kind can be bought for ₹ 1,620?

**Solution:**

Cost of 25 m of cloth = ₹1012.50

(i) Cost of 1 m of cloth = $₹\frac{1012.50}{25}$

$\therefore$ Cost of 20 m of cloth = $₹\frac{1012.50}{25} \times 20$

= ₹810

(ii) Cloth purchased by ₹1012.5 = 25 m

Cloth purchased by ₹1 = $\frac{25}{1012.5}$

$\therefore$ Cloth purchased by ₹1620 = $\frac{25}{1012.5} \times$

1620 = 40 metres



**Question 10.**

In a particular week, a man works for 48 hours and earns ₹ 4,320. But in the next week he worked 6 hours less, how much has he earned in this week?

**Solution:**

Money earned for working 48 hours = ₹4320

Money earned for working 1 hour = $\frac{4320}{48}$

Money earned for working 42 hours (48 – 6 hours)

= $₹\frac{4320}{48} \times 42$ = ₹3780