

After 15% increment it will be ₹115.

Salary after increment Salary before increment

115

100

34500

x

$$115 \times x = 34500 \times 100$$

$$\Rightarrow x = \frac{34500 \times 100}{115} = 30000$$

Man's monthly salary before the increment = ₹30,000.

EXAMPLE 22: In a certain year the population of a country was about 97 crore. If it increases by 2% will be its population after one year?

SOLUTION: Population increased in one year = 2% of 97 crore = 1.94 crore
Total population after one year = (97 + 1.94) crore = 98.94 crore = 98 crore 94 lakh

Alternative Method

$$\text{New population after one year} = \frac{102}{100} \times 97 = \frac{9894}{100} = 98.94 \text{ crore}$$

Exercise 8.2

1. Find

a. 60% of 1 km in metres

b. 35% of ₹500

c. $6\frac{1}{4}\%$ of 1200

d. 2.5% of 300

e. 12.5% of 400

f. $11\frac{1}{9}\%$ of 720

2. Express the required per cent:

a. 50 paise as a percentage of ₹5

c. 2 minutes as a percentage of 1 hour

b. ₹12 as a percentage of ₹20

d. 250 g as a percentage of 2 kg

3. Find the number:

a. $33\frac{1}{3}\%$ of what number is 24?

c. 25% of what number is 9?

b. 60% of what number is 45?

d. 75% of what number is 18?

4. Find the whole quantity if

a. 13% of the whole amount is ₹1170

c. 8% of the whole quantity is 48 litres

b. 5% of the whole is 750

d. 80% of the whole time is 16 minutes