EXERCISE 12.3 PAGE NO. 259

1. If the cost of 7 m of cloth is ₹ 1470, find the cost of 5 m of cloth.

Solutions:

Given

Cost of 7 m cloth = ₹ 1470

Cost of 1 m cloth = 1470 / 7

= ₹ 210

So, cost of 5 cloth = 210 × 5 = 1050

∴ The cost of 5 m cloth is ₹ 1050.

2. Ekta earns ₹ 3000 in 10 days. How much will she earn in 30 days?

Solutions:

Money earned by Ekta in 10 days = ₹ 3000

Money earned by her in one day = 3000 / 10

= ₹ 300

So, money earned by her in 30 days = 300 × 30

= ₹ 9000.

3. If it has rained 276 mm in the last 3 days, how many cm of rain will fall in one full week (7 days)? Assume that the rain continues to fall at the same rate.

Solutions:

The measure of rain in 3 days = 276 mm

The measure of rain in one day = 276 / 3

= 92 mm

So, the measure of rain in one week, i.e. 7 days = 92 × 7

= 644 mm

= 644 / 10

= 64.4 cm

4. Cost of 5 kg of wheat is ₹ 91.50.

(a) What will be the cost of 8 kg of wheat?

(b) What quantity of wheat can be purchased for ₹ 183?

Solutions:

(a) Cost of 5 kg wheat = ₹ 91.50.

Cost of 1 kg wheat = 91.50 / 5

= ₹ 18.3

So, the cost of 8 kg wheat = 18.3 × 8

= ₹ 146.40

(b) Wheat purchased for ₹ 91.50 = 5 kg

Wheat purchased for ₹ 1 = 5 / 91.50 kg

So, wheat purchased for ₹ 183 = (5 / 91.50) × 183

= 10 kg

5. The temperature dropped 15^0 C in the last 30 days. If the rate of temperature drop remains the same, how many degrees will the temperature drop in the next ten days?

Solutions:

Temperature drop in 30 days = 15^0 C

Temperature drop in 1 day = 15 / 30

= $(1 / 2)^0$ C

So, the temperature drop in next 10 days = (1 / 2) × 10

= 5^0 C

∴ The temperature drop in the next 10 days will be 5^0 C

6. Shaina pays ₹ 15000 as rent for 3 months. How much does she have to pay for a whole year if the rent per month remains the same?

Solutions:

Rent paid by Shaina in 3 months = ₹ 15000

Rent for 1 month = 15000 / 3

= ₹ 5000

So, rent for 12 months, i.e. 1 year = 5000 × 12

= ₹ 60,000

∴ Rent paid by Shaina in 1 year is ₹ 60,000

7. Cost of 4 dozen bananas is ₹ 180. How many bananas can be purchased for ₹ 90?

Solutions:

Number of bananas bought for ₹ 180 = 4 dozens

= 4 × 12

= 48 bananas

Number of bananas bought for ₹ 1 = 48 / 180

So, number of bananas bought for ₹ 90 = (48 / 180) × 90

= 24 bananas

∴ 24 bananas can be purchased for ₹ 90

8. The weight of 72 books is 9 kg. What is the weight of 40 such books?

Solutions:

Weight of 72 books = 9 kg

Weight of 1 book = 9 / 72

= 1 / 8 kg

So, weight of 40 books = (1 / 8) × 40

= 5 kg

∴ The weight of 40 books is 5 kg.

9. A truck requires 108 litres of diesel to cover a distance of 594 km. How much diesel will be required by the truck to cover a distance of 1650 km?

Solutions:

Diesel required for 594 km = 108 litres

Diesel required for 1 km = 108 / 594

= 2 / 11 litre

So, diesel required for 1650 km = (2 / 11) × 1650

= 300 litres

∴ The diesel required by the truck to cover a distance of 1650 km is 300 litres.

10. Raju purchases 10 pens for ₹ 150, and Manish buys 7 pens for ₹ 84. Can you say who got the pens cheaper?

Solutions:

Pens purchased by Raju for ₹ 150 = 10 pens

Cost of 1 pen = 150 / 10

= ₹ 15

Pens purchased by Manish for ₹ 84 = 7 pens

Cost of 1 pen = 84 / 7

= ₹ 12

∴ Pens purchased by Manish are cheaper than those of Raju.

11. Anish made 42 runs in 6 overs, and Anup made 63 runs in 7 overs. Who made more runs per over?

Solutions:

Runs made by Anish in 6 overs = 42

Runs made by Anish in 1 over = 42 / 6

= 7

Runs made by Anup in 7 overs = 63

Runs made by Anup in 1 over = 63 / 7

= 9

∴ Anup scored more runs than Anish.