

Access NCERT Solutions for Class 6 Chapter 12: **Ratio and Proportion Exercise 12.3**

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 = $210 \times 5 = 1050$

∴ 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 in one day by her = $3000 / 10$

= ₹ 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:

Measure of rain in 3 days = 276 mm

Measure of rain in one day = $276 / 3$

= 92 mm

So, 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 in ₹ 183?

Solutions:

(a) Cost of 5 kg wheat = ₹ 91.50.

Cost of 1 kg wheat = $91.50 / 5$

= ₹ 18.3

So, cost of 8 kg wheat = 18.3×8

= ₹ 146.40

(b) Wheat purchased in ₹ 91.50 = 5 kg

Wheat purchased in ₹ 1 = $5 / 91.50$ kg

So, wheat purchased in ₹ 183 = $(5 / 91.50) \times 183$

= 10 kg

5. The temperature dropped 15 degree celsius 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°C

Temperature drop in 1 day = $15 / 30$

= $(1 / 2)^{\circ}\text{C}$

So, temperature drop in next 10 days = $(1 / 2) \times 10$

= 5°C

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

6. Shaina pays ₹ 15000 as rent for 3 months. How much does she has to pay for a whole year, if the rent per month remains 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 in ₹ 180 = 4 dozens

$$= 4 \times 12$$

= 48 bananas

Number of bananas bought in ₹ 1 = $48 / 180$

So, number of bananas bought in ₹ 90 = $(48 / 180) \times 90$

= 24 bananas

∴ 24 bananas can be purchased in ₹ 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 = $9 / 72$

$$= 1 / 8 \text{ kg}$$

So, weight of 40 books = $(1 / 8) \times 40$

= 5 kg

∴ Weight of 40 books is 5 kg

9. A truck requires 108 litres of diesel for covering 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 = $108 / 594$

$$= 2 / 11 \text{ litre}$$

So, diesel required for 1650 km = $(2 / 11) \times 1650$

= 300 litres

∴ 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 in ₹ 150 = 10 pens

Cost of 1 pen = $150 / 10$

= ₹ 15

Pens purchased by Manish in ₹ 84 = 7 pens

Cost of 1 pen = $84 / 7$

= ₹ 12

∴ Pens purchased by Manish are cheaper than 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.