

### Ratio and Proportion Ex 9.1 Q11

### Answer:

We have

Sum of the terms of the ratio = 2 +3 +5 = 10

Therefore, P's share =Rs 
$$\left(\frac{2}{10} \times 2000\right)$$
 = Rs 400

Q's share = Rs  $\left(\frac{3}{10} \times 2000\right)$  = Rs 600

R's share = Rs  $\left(\frac{5}{10} \times 2000\right)$  = Rs 1000

## Ratio and Proportion Ex 9.1 Q12

#### Answer:

We have the ratio boys: girls = 7:4.

So, let there be 7x boys and 4x girls. It is given that there are a total of 550 students in the school. Therefore, 7x + 4x = 550

$$11x = 550$$
$$x = \frac{550}{11} = 50$$

Hence, the number of boys =  $7x = 7 \times 50 = 350$ , and the number of girls =  $4x = 4 \times 50 = 200$ .

## Ratio and Proportion Ex 9.1 Q13

#### Answer:

We have the ratio of income: savings = 7:2.

So, let the income be 7x and the savings be 2x. It is given that the savings are Rs 500.

Therefore, 
$$2x = 500$$

$$x = Rs \frac{500}{2} = Rs 250$$

Thus, the income =  $7x = 7 \times 250 = Rs 1750$ .

Now, expenditure = Income - savings = Rs 1750 - Rs 500 = Rs 1250

Thus, the income = Rs 1750, and the expenditure = Rs 1250.

# Ratio and Proportion Ex 9.1 Q14

#### Answer:

We have the ratio of the sides of the triangle = 1:2:3.

Now, let the sides of the triangle be x, 2x and 3x, respectively.

Therefore, the perimeter = x + 2x + 3x = 36

$$\Rightarrow 6x = 36$$
$$\Rightarrow x = \frac{36}{6} = 6$$

Thus, the sides of the triangle = x = 6 cm;  $2x = 2 \times 6 = 12$  cm;  $3x = 3 \times 6 = 18$  cm. So, the sides of the triangle = 6 cm, 12 cm and 18 cm.

## Ratio and Proportion Ex 9.1 Q15

## Answer:

We have

Sum of the terms of the ratio = 2 + 3 = 5, and the total sum = Rs 5500 Therefore, Raman's share =  $\left(\frac{2}{5} \times 5500\right)$  = Rs 2200

Aman's share = 
$$\left(\frac{3}{5} \times 5500\right)$$
 = Rs 3300