

Exercise 8F

1st Sale price of wrist watch = ₹ 540

$$\text{Tax} = 8\% \text{ of } ₹ 540 = \frac{8}{100} \times 540 = \frac{216}{5} = 43.2$$

Total amount paid by Rajat = ₹ (540 + 43.2) = ₹ 583.2

2nd Sale price = ₹ 3,840

Sale tax price = ₹ 345.60

$$\text{Rate of tax} = \frac{\text{Sale tax}}{\text{Sale price}} \times 100 = \frac{345.60}{3840} \times 100 = \frac{34560}{100 \times 3840} \times 100 = 9\%$$

3) S.P of washing machine = ₹ 13,530

Rate of sale tax = 7%

$$\begin{aligned} \therefore \text{Cost price} &= \frac{\text{S.P} \times 100}{(100 + \text{Rate of sale tax})} = \frac{13530 \times 100}{100 + 7} \\ &= \frac{13530 \times 100}{107} = 1237100 \div 100 = \text{₹} 12,300 \end{aligned}$$

4) Sale price of biscuits = ₹ 158

Rate of sales tax on biscuits = 6%

Amount paid for biscuits

$$= ₹ 158 + 6\% \text{ of } ₹ 158$$

$$= ₹ 158 + \frac{6}{100} \times 158 = \text{₹} 158 + \frac{948}{100} = \text{₹} 158 + \text{₹} 9.48$$

$$= ₹ 158 + \frac{237}{25} = ₹ 158 + ₹ 9.48 = ₹ 167.48$$

The sale price of cosmetics good = ₹ 354

Rate of sales tax = 9%

Amount paid for cosmetic goods = ₹ 354 +

$$= ₹ 354 + 9\% \text{ of } ₹ 354$$

$$= ₹ 354 + \frac{9}{100} \times 354 = ₹ 354 + \frac{3186}{100} = ₹ 354 + ₹ 31.86$$

$$= ₹ 354 + \frac{3186}{100} = ₹ 354 + ₹ 31.86 = ₹ 385.86$$

Total amount paid by Sarita = ₹ 167.48 + ₹ 385.86

$$= ₹ 553.34$$

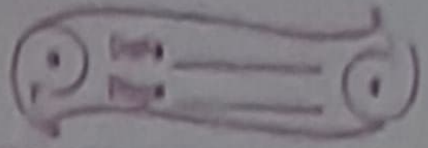
5) Total price of T.V = ₹ 13,407

The rate of sales tax = 9%

Let sale price = ₹ x

ATQ,

$$x + 9\% \text{ of } x = ₹ 13,407$$


$$\Rightarrow y + \frac{9y}{100} = ₹ 13407$$

$$\Rightarrow \frac{109y}{100} = ₹ 13407$$

$$\Rightarrow y = \frac{13407 \times 100}{109} = ₹ 12300$$

New rate of sales tax = 13%.

$$\begin{aligned} \text{New total price of TV} &= ₹ 12300 + 13\% \text{ of } ₹ 12300 \\ &= ₹ 12300 + \frac{13}{100} \times 12300 \end{aligned}$$

$$= ₹ 12300 + ₹ 1599 = ₹ 13899$$

$$\text{Money paid} = ₹ 13899 - ₹ 13407 = ₹ 492$$