

Ex - 8(E)

1. Rajat purchases a wrist-watch costing ₹ 540. The rate of tax is 8%. Find the total amount paid by Rajat for the watch.

Ans.

$$\text{Cost of watch} = ₹ 540$$

$$\text{Rate of Sales tax} = 8\%$$

$$\text{Amount of sales tax} = \frac{540}{100} \times \frac{8}{100}$$

$$= ₹ \frac{4320}{100} = ₹ 43.20$$

$$\text{Total price} = \text{CP} + \text{Tax} = ₹ (540 + 43.20) = ₹ 583.20$$

So, Rajat has to pay total amount ₹ 583.20 for the watch.

2. Ramesh paid ₹ 345.60 as tax on a purchase of ₹ 3,840. Find the rate of tax.

Ans.

$$\text{On ₹ 3840, sales tax is} = ₹ 345.60$$

$$\text{Percent of sales tax} = \frac{345.60 \times 100}{3840}$$

$$= \frac{34560 \times 100}{100 \times 3840}$$

$$= 9\%$$

5. The price of a washing machine, inclusive of Tax, is ₹ 13,530. If the tax is 10%, find its basic (cost) price.
SP of washing machine = ₹ 13,530.

Rate of tax = 10%.

$$CP = \frac{SP \times 100}{100 + \text{Rate of Sales tax}}$$

$$= \frac{13530 \times 100}{100 + 10}$$

$$= \frac{13530 \times 100}{110} = ₹ 12,300$$

4. Sarita purchases biscuits costing ₹ 158 on which the rate of tax is 6%. She also purchases some cosmetic goods costing ₹ 354 on which the rate of tax is 9%. Find the total amount to be paid by Sarita.

Ans Cost of biscuits = ₹ 158

$$\text{Sales tax @ 6\%} = ₹ 158 \times \frac{6}{100} = \frac{948}{100}$$

$$= ₹ 9.48$$

$$\begin{aligned} \text{Total price of biscuits} &= ₹(158 + 9.48) \\ &= ₹ 167.48 \end{aligned}$$

$$\text{Cost of cosmetic goods} = ₹ 354$$

$$\begin{aligned} \text{Sales tax @ 9\%} &= ₹ 354 \times \frac{9}{100} \\ &= \frac{3186}{100} = ₹ 31.86 \end{aligned}$$

$$\begin{aligned} \text{Total cost of cosmetic goods} &= ₹(354 + 31.86) \\ &= ₹ 385.86 \end{aligned}$$

$$\begin{aligned} \text{Total amount paid by Savita} &= \\ &= ₹(167.48 + 385.86) \\ &= ₹ 553.34 \end{aligned}$$

5. The price of a T.V. set inclusive of tax of 9% is ₹ 13,407. Find its marked price. If tax is increased to 13%, how much more does the customer has to pay for the T.V. set?

Ans

$$\text{Sales price of TV set} = ₹ 13,407$$

$$\text{Rate of sales tax} = 9\%$$

$$\text{Let marked price of TV} = ₹$$

Then Sale price

$$= x + \frac{x \times 9}{100} = \frac{100x + 9x}{100} = \frac{109x}{100}$$

$$\frac{109x}{100} = ₹ 13,407$$

$$x = \frac{13407 \times 100}{109} = ₹ 12,300$$

Marked Price = ₹ 12,300

In Second case, Sales tax = 13%

$$\text{Amount of sales tax} = ₹ 12,300 \times \frac{13}{100}$$

$$= ₹ 1,599$$

$$\text{Sales price} = ₹ (12,300 + 1,599) = ₹ 13,899$$

Difference between the two sales price

$$= ₹ (13,899 - 13,407) = ₹ 492$$