Ex 8(E)

1) Wrist-watch costing = ₹540
Rate of tax = 8%

= 8% of ₹540 = $\frac{8}{100} \times 540^{27} = \frac{216}{5} = 43.20$

Total amount = $43.2 + 540 = ₹583.20$.

2) ₹345.60 as tax
Purchase of ₹3840
Rate of tax = $\frac{345.60}{3840} \times 100\%$

$= \frac{34560}{100} \times \frac{1}{3840} \times 100 = \frac{3}{2} = 1.5$

Rate of tax = $\frac{\text{Tax}}{\text{S.P}} \times 100\%$

$= \frac{345.60}{3840} \times 100 = \frac{34560}{3840} = 9\%$.

3) Let the sale price of an article = x
$x + x$ of 10% = ₹13530

$x + \frac{10x}{100} = ₹13530$

$\frac{110x}{100} = ₹13530$

$11x = 13530 \times 10$
$11x = 135300$
$x = \frac{135300}{11} = ₹12300$

4) SP = ₹158
Rate of tax = 6%
C.P = ?
Price of biscuits including tax.
₹158 + 158 of 6%
$₹158 + 158 \times \frac{6}{100} = ₹158 + ₹9.48$

$= 158 + 9.48 = ₹ 167.48$

Price of ~~cosmesting~~ cosmetic goods including tax $= ₹ 354 + ₹ 354$ of 9%.

$= ₹ 354 + ₹ 354 \times \frac{9}{100} = ₹ 354 + \frac{1593}{50}$

$= ₹ 354 + ₹ 31.86 = ₹ 385.86$

Total amount to be paid by sarita $= ₹ 167.48 + ₹ 385.86 = ₹ 533.34$

5) Let the marked price $= ₹ x$

$x + 9\%$ of $x = ₹ 13407$

$x + \frac{9}{100} \times x = ₹ 13407$

$= x + \frac{9x}{100} = ₹ 13407$

$= \frac{100x + 9x}{100} = ₹ 13407$

$= \frac{109x}{100} = ₹ 13407$

$109x = 13407 \times 100$

$109x = ₹ 1340700$

$x = \frac{1340700}{109} = ₹ 12300$

MP $= ₹$ 12300

If the tax is increased to 13%.

MP + 13% of MP

$₹ 12300 + \frac{13}{100} \times 12300$

$= ₹ 12300 + ₹ 1599 = ₹ 13899$

Customer has to pay $= ₹ 13899 - ₹ 13407 = ₹ 492$

6) Let the sale price of article $= ₹ x$

The price of article $= ₹ 8250$

Rate of $x = 10\%$

$x + 10\%$ of $x = ₹ 8250$

$= x + \frac{10}{100} \times x = ₹ 8250$

$= x + \frac{10x}{100} = ₹ 8250$

$$\frac{100x + 10x}{100} = ₹8250$$

$$= \frac{110x}{100} = ₹8250$$

$$= 110x = ₹8250 \times 100$$

$$= 110x = ₹825000$$

$$x = \frac{825000}{110} = ₹7500$$

(or)

$$x = \frac{82500}{11} = ₹7500$$

i) New rate of Sale tax = 15 %.

New total price = ₹7500 + 15 % of ₹7500

$$= ₹7500 + \frac{15}{100} \times ₹7500$$

$$= ₹7500 + 1125 = ₹8625$$

More money paid = ₹8625 − ₹8250 = ₹375

ii) New rate of Sale tax = 6 %.

New total price = ₹7500 + 6 % of ₹7500

$$= 7500 + \frac{6}{100} \times 7500$$

$$= ₹7950$$

iii) New rate of Sale tax = 2 %.

New total price = ₹7500 + 2 % of 7500

$$= 7500 + \frac{2}{100} \times 7500$$

$$= ₹7650$$

iv) New rate of Sale tax = 3 %.

New total price = ₹7500 + 3 % of ₹7500

$$= ₹7500 + \frac{3}{100} \times 7500$$

$$= ₹7725$$

) ~~MP(list price)~~ of the ~~bicy~~ bicycle = ₹1600

7) Sale price of a bicycle = ₹1664
List price (marked price) = ₹1600
Amount of sales tax = $\frac{\text{Amount of sale tax} \times 100}{MP}$

$= \frac{64 \times 100}{1600} = 4\%$

In second case, rate of sale tax
$= 4 + 6 = 10\%$

Amount of sale tax = ~~1600 × 10~~ ~~Rate M.P × 100 × 10~~ / Sale price

$\frac{MP \times \text{saletax}(\%)}{100} = \frac{1600 \times 10}{100} = ₹160$

Sale price = ₹1600 + ₹160 = ₹1760

8) Let the M.P of TV = ₹x
Sale tax when the rate is 9% $= \frac{9}{100}x = \frac{9x}{100}$
Sale price is $x + \frac{9x}{100}$
Sales tax when the rate is 6% $= \frac{6}{100}x = \frac{6x}{100}$
Sale price is $x = \frac{6}{100}x$
Difference of sale price = ~~x +~~ $\frac{9x}{100}$ ~~÷ x~~ $- \frac{6x}{100}$

LCM = 100
= ~~100 ÷ 100 × a~~
$= \frac{9x}{100} - \frac{6x}{100}$ LCM = 100

$= \frac{9x - 6x}{100} = \frac{3x}{100}$

Saving for Geeta = ₹780
We have = ₹780 = $\frac{3x}{100}$

$\frac{3x}{100} = ₹780$

$3x = ₹780 \times 100$
$3x = ₹78000$

$\therefore = \frac{78000}{3} = ₹26,000$

26
3|78
6
18

9) SP of an article = ₹ 21,384
Tax = 10%
Actual Ro

Let x be the list price of an article
Rate of sale tax = 10%
According to given statement, we have

$$₹\,21384 = x + x \text{ of } \frac{10}{100}$$

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

$$x + \frac{10x}{100} = ₹\,21384$$

$$\frac{100x + 10x}{100} = ₹\,21384$$

$$\frac{110x}{100} = ₹\,21384$$

$$\frac{11x}{10} = ₹\,21384$$

$$11x = ₹\,21384 \times 10$$

$$11x = ₹\,213840$$

$$x = \frac{213840}{11} = 1134.99$$