

104 C.P of bicycle = ₹100

∴ In first case

When profit = 5%

$$S.P = ₹(100 + 5) = ₹105$$

In second case

$$C.P. = \frac{100 - 30}{100} \times 100 = ₹ 70$$

$$\text{Profit} = 30\%$$

$$S.P. = \left(\frac{100 + \text{profit}}{100} \right) \times C.P. = \left(\frac{100 + 30}{100} \right) \times ₹ 70$$
$$= \frac{130}{100} \times 70 = ₹ 91$$

$$\text{Difference of two selling price} = ₹ 105 - ₹ 91 = ₹ 14$$

Applying unitary method

If the difference is ₹ 14, then C.P of bicycle = ₹ 100

If the difference is ₹ 1, the C.P of bicycle = ₹ $\frac{100}{14}$

If the difference is ₹ 63, the C.P of bicycle

$$= \frac{100}{14} \times 63 = ₹ 450$$

114 C.P of article = ₹ 100

When loss = 8%.

$$S.P = ₹(100 - 8) = ₹ 92$$

$$C.P = \frac{100 - 10}{100} \times 100 = ₹ 90$$

Profit = 20%.

$$SP = \left(\frac{100 + \text{Profit}}{100} \right) \times CP = \left(\frac{100 + 20}{100} \right) \times 90 = \frac{120}{100} \times 90 = ₹ 108$$

Difference in of two selling price = ₹(108 - 92) = ₹16

Applying unitary method

If the difference is ₹16, then C.P = ₹100

If the difference is ₹1, then C.P = ₹100

If the difference is ₹36, the C.P = $\frac{100 \times 36}{16} = ₹225$

Remaining 0(0)