



Q7. A, and B were partners in a firm sharing profits in 3:2 ratio. They admitted C for $\frac{3}{7}$ share which he took $\frac{2}{7}$ from A and $\frac{1}{7}$ from B. Calculate new profit sharing ratio?
Solution.

$$\begin{aligned} \text{Old Ratio} &= \begin{matrix} \text{A:} & \text{B} \\ 3: & 2 \end{matrix} \\ &= \frac{3}{5} : \frac{2}{5} \end{aligned}$$

C admitted for $\frac{3}{7}$ share in the new firm

$$\text{A's sacrifice} = \frac{2}{7}$$

$$\text{B's sacrifice} = \frac{1}{7}$$

New Ratio = Old Ratio - Sacrificing Ratio

$$A = \frac{3}{5} - \frac{2}{7} = \frac{21 - 10}{35} = \frac{11}{35}$$

$$B = \frac{2}{5} - \frac{1}{7} = \frac{14 - 5}{35} = \frac{9}{35}$$

$$\begin{aligned} \text{New Ratio} &= \begin{matrix} \text{A:} & \text{B} & \text{:C} \\ \frac{11}{35} : & \frac{9}{35} : & \frac{3}{7} \end{matrix} \end{aligned}$$

$$= \frac{11 : 9 : 15}{35}$$

$$= 11 : 9 : 15$$

Q8. A, B and C were partners in a firm sharing profits in 3:3:2 ratio. They admitted d as a new partner for $\frac{4}{7}$ profit. D acquired his share $\frac{2}{7}$ from A. $\frac{1}{7}$ from B and $\frac{1}{7}$ from C. Calculate new profit sharing ratio?
Solution.

$$\begin{aligned}
 \text{Old Ratio} &= \begin{array}{ccc} \text{A:} & \text{B} & \text{:C} \\ 3: & 3: & 2 \\ = \frac{3}{8} : & \frac{3}{8} : & \frac{2}{8} \end{array}
 \end{aligned}$$

D admitted for $\frac{3}{7}$ share of profit in new firm.

$$\begin{array}{cccc}
 \text{D's share} = & \text{A's Sacrifice} + & \text{B's Sacrifice} + & \text{C's Sacrifice} \\
 \frac{4}{7} = & \frac{2}{7} + & \frac{1}{7} + & \frac{1}{7}
 \end{array}$$

New Ratio = Old Ratio - Sacrificing Ratio

$$A = \frac{3}{8} - \frac{2}{7} = \frac{21 - 16}{56} = \frac{5}{56}$$

$$B = \frac{3}{8} - \frac{1}{7} = \frac{21 - 8}{56} = \frac{13}{56}$$

$$C = \frac{2}{8} - \frac{1}{7} = \frac{14 - 8}{56} = \frac{6}{56}$$

$$\begin{array}{ccccccc}
 & \text{A:} & \text{B} & & \text{:C} & & \text{:D} \\
 \text{New Ratio} = & \frac{5}{56} : & \frac{13}{56} : & \frac{6}{56} : & & \frac{4}{7}
 \end{array}$$

$$= \frac{5 : 13 : 6 : 32}{56}$$

$$= 5 : 13 : 6 : 32$$

***** END *****