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

Solution.

$$\begin{array}{ccc} & A: & B \\ \text{Old Ratio} = & 3: & 2 \\ = & \dfrac{3}{5} : & \dfrac{2}{5} \end{array}$$

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

A's sacrifice $= \dfrac{2}{7}$

B's sacrifice $= \dfrac{1}{7}$

New Ratio = Old Ratio - Sacrificing Ratio

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

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

$$\begin{array}{cccc} & A: & B & :C \\ \text{New Ratio} = & \dfrac{11}{35} : & \dfrac{9}{35} : & \dfrac{3}{7} \end{array}$$

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

$$= 11:9:15$$

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 4/7 profit. D acquired his share 2/7 from A. 1/7 from B and 1/7 from C. Calculate new profit sharing ratio?

Solution.

	A:	B	:C
Old Ratio =	3:	3:	2
	$\frac{3}{8}$:	$\frac{3}{8}$:	$\frac{2}{8}$

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

D's share =	A's Sacrifice +	B's Sacrifice +	C's Sacrifice
$\frac{4}{7}$ =	$\frac{2}{7}$ +	$\frac{1}{7}$ +	$\frac{1}{7}$

New Ratio = Old Ratio - Sacrificing Ratio

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

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

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

	A:	B	:C	:D
New Ratio=	$\frac{5}{56}$:	$\frac{13}{56}$:	$\frac{6}{56}$:	$\frac{4}{7}$

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

$= 5:13:6:32$

********** END *********