Q3. X and Y are partners sharing profits in 5:3 ratio admitted Z for 1/10 share which he acquired equally for X and Y. Calculate new profit sharing ratio?

Solution.

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

$$= \frac{5}{8} : \frac{3}{8}$$

Z admits for $\frac{1}{10}$ share in the new firm

X and Y each sacrifice $= \frac{1}{10} \times \frac{1}{2} = \frac{1}{20}$

New Ratio = Old Ratio - Sacrificing Ratio

$$X's = \frac{5}{8} - \frac{1}{20} = \frac{25-2}{40} = \frac{23}{40}$$

$$Y's = \frac{3}{8} - \frac{1}{20} = \frac{15-2}{40} = \frac{13}{40}$$

$$\text{New Ratio} = \begin{array}{ccc} A: & B & :C \\ \frac{23}{40} : & \frac{13}{40} : & \frac{1}{10} \end{array}$$

$$= \frac{23:13:4}{40}$$

$$= 23:13:4$$

Q4. A, B and C are partners sharing profits in 2:2:1 ratio admitted D for 1/8 share which he acquired entirely from A. Calculate new profit sharing ratio?

Solution.

	A:	B	:C
Old Ratio=	2:	2:	1
=	$\frac{2}{5}$:	$\frac{2}{5}$:	$\frac{1}{5}$

D admits for $\frac{1}{8}$ share in the new firm, which he taken from A.

Here only A will sacrifice.

New Ratio = Old Ratio - Sacrificing Ratio

$$A = \frac{2}{5} - \frac{1}{8} = \frac{16-5}{40} = \frac{11}{40}$$

	A:	B	:C	:D
New Ratio=	$\frac{11}{40}$:	$\frac{2}{5}$:	$\frac{1}{5}$:	$\frac{1}{8}$

$$= \frac{11 : 16 : 8 : 5}{40}$$

$$= 11 : 16 : 8 : 5$$