

1 Old Profit Sharing Ratio

Gita	Radha	Garv
1/2	2/5	1/10
5	4	1

 Or

Garv retires

The new profit sharing ratio is not given

Also the ratio in which the share acquired (Gaining ratio) is not given

So the remaining partners will share in their old profit sharing ratio

New Profit Sharing ratio

Gita	Radha
5	4

2 Old profit sharing ratio

X	Y	Z
1/2	3/10	1/5
5	3	2

 or

Y retires

The new profit sharing ratio is not given

Also the ratio in which the share acquired is not given

So the remaining partners will share in their old profit sharing ratio

New Profit Sharing ratio and gaining ratio

X	Z
5	2

We can check gaining ratio by calculation

Gaining ratio = New ratio - old ratio

X's gaining ratio

$$5/7 - 5/10 = \frac{3}{14}$$

Z's Gaining Ratio

$$2/7 - 2/10 = \frac{3}{35}$$

Final Gaining ratio

X	Z	or
15	6	
5	2	

3 (a) Old Profit Sharing Ratio

Shiv	Mohan	Hari	Total
5	5	4	14

Mohan Retires

His share taken by remaining partners in the ratio 1:1

$$5/14$$

Share taken by Shiv out of Mohan's Share

$$5/14 * 1/2$$

5/28

Share taken by Hari out of Mohan's Share

$$5/14 * 1/2$$

5/28

Shiv's New share
Hari's New Share

$$5/14 + 5/28$$
$$4/14 + 5/28$$

15/28
13/28

Thus, New profit sharing ratio

Shiv	Hari
15	13

3 (b) Old Profit Sharing Ratio

P	Q	R
5	4	1

P retires

The new profit sharing ratio is not given

Also the ratio in which the share acquired is not given
So the remaining partners will share in their old profit sharing ratio

New Profit Sharing ratio

Q	R
4	1

4 Old Profit Sharing Ratio

R	S	M
2/5	2/5	1/5
2	2	1

 Or

M Retires

1/5

His share taken by remaining partners in the ratio 1:2

Share taken by R out of M's Share	$1/5 * 1/3$	$1/15$
Share taken by S out of M's Share	$1/5 * 2/3$	$2/15$

R's New share	$2/5 + 1/15$	$7/15$
S's New Share	$2/5 + 2/15$	$8/15$

Thus, New profit sharing ratio	R	S
	7	8

5 Old profit sharing ratio

Sarthak	Vansh	Mansi	Total
4	3	2	9

Sarthak retires

New Profit sharing ratio

Vansh	Mansi	Total
2	1	3

Gaining ratio = New ratio - old ratio

Vansh's gaining ratio	$2/3 - 3/9$	$1/3$
Mansi's Gaining Ratio	$1/3 - 2/9$	$1/9$

Final Gaining ratio

Vansh	Mansi
3	1

6 (a) Old profit sharing ratio

W	X	Y	Z
1/3	1/6	1/3	1/6
2	1	2	1

 Or

Y retires

New Profit sharing ratio

W	X	Z
1	1	1

Gaining ratio = New ratio - old ratio

W's gaining ratio

X's Gaining Ratio

Z's Gaining Ratio

$1/3 - 2/6$	0
$1/3 - 1/6$	1/6
$1/3 - 1/6$	1/6

Final Gaining ratio

W	X	Z
0	1	1

6 (b) Old profit sharing ratio

A	B	C
4	3	2

C retires

2/9

A acquires 4/9 of C's share

$$4/9 * 2/9 = \boxed{8/81}$$

So, balance of C's share is acquired by B

$$2/9 - 8/81 = \boxed{10/81}$$

A's new share

$$4/9 + 8/81 = \boxed{44/81}$$

B's New share

$$3/9 + 10/81 = \boxed{37/81}$$

New Profit sharing ratio

A	B	Total
44	37	81

Gaining Ratio

A	B
$\frac{8}{81}$	$\frac{10}{81}$
4	5

7 Old profit sharing ratio

Kumar	Lakshya	Manoj	Naresh	Total
3	2	1	4	10

Kumar retires

Lakshya acquires $\frac{3}{5}$ of Kumar's share

$$\frac{3}{5} * \frac{3}{10}$$

$\frac{9}{50}$

Lakshya New Share

$$\frac{2}{10} + \frac{9}{50}$$

$$\frac{19}{50}$$

Manoj acquires $\frac{2}{5}$ of Kumar's share

$$\frac{2}{5} * \frac{3}{10}$$

$\frac{3}{25}$

Manoj New Share

$$\frac{1}{10} + \frac{3}{25}$$

$$\frac{11}{50}$$

Lakshya's new share

$$\frac{2}{10} + \frac{9}{50}$$

$\frac{19}{50}$

Manoj's New share

$$\frac{1}{10} + \frac{3}{25}$$

$\frac{11}{50}$

New Profit sharing ratio

Lakshya	Manoj	Naresh
$\frac{19}{50}$	$\frac{11}{50}$	$\frac{2}{5}$
19	11	20

Gaining Ratio

Lakshya	Manoj
$\frac{9}{50}$	$\frac{3}{25}$
9	6
3	2

8 Old Profit Sharing Ratio

A	B	C	Total
8	4	3	15

B Retires

His share taken by remaining partners in the ratio 1:1

Share taken by A out of B's Share

$$\frac{4}{15} * \frac{1}{2}$$

$\frac{2}{15}$

Share taken by C out of B's Share

$$\frac{4}{15} * \frac{1}{2}$$

$\frac{2}{15}$

A's New share

$$\frac{8}{15} + \frac{2}{15}$$

$\frac{2}{3}$

C's New Share

$$\frac{3}{15} + \frac{2}{15}$$

$\frac{1}{3}$

Thus, New profit sharing ratio

A	C
2	1

9 Old Profit Sharing Ratio

A	B	C	Total
5	3	2	10

C Retires

His share taken by remaining partners in the ratio 1:0

Share taken by A out of C's Share	$2/10 * 1/1$	<table border="1"><tr><td>1/5</td></tr></table>	1/5
1/5			
Share taken by B out of C's Share	$2/10 * 0/1$	<table border="1"><tr><td>0</td></tr></table>	0
0			

A's New share	$5/10 + 1/5$	<table border="1"><tr><td>7/10</td></tr></table>	7/10
7/10			
B's New Share	$3/10 + 0$	<table border="1"><tr><td>3/10</td></tr></table>	3/10
3/10			

Thus, New profit sharing ratio	<table border="1"><tr><td>A</td><td>B</td></tr><tr><td>7</td><td>3</td></tr></table>	A	B	7	3
A	B				
7	3				

10 Old Profit Sharing Ratio

Murli	Naveen	Omprakash	Total
$3/8$	$1/2$	$1/8$	1
3	4	1	8

$3/8$

Murli Retires

Murli surrenders in favour of Naveen	$2/3 * 3/8$	<table border="1"><tr><td>1/4</td></tr></table>	1/4	$2/3 \times 3/8$
1/4				
Murli surrenders in favour of Omprakash	$3/8 - 1/4$	<table border="1"><tr><td>1/8</td></tr></table>	1/8	$3/8 - 1/4$
1/8				

Naveen's New share	$4/8 + 1/4$	<table border="1"><tr><td>3/4</td></tr></table>	3/4	$4/8 + 1/4$
3/4				
Omprakash's New Share	$1/8 + 1/8$	<table border="1"><tr><td>1/4</td></tr></table>	1/4	$1/8 + 1/8$
1/4				

Thus, New profit sharing ratio	<table border="1"><tr><td>Naveen</td><td>Omprakash</td><td>Total</td></tr></table>	Naveen	Omprakash	Total
Naveen	Omprakash	Total		

$\frac{3}{4}$	$\frac{1}{4}$	
3	1	4

Gaining Ratio

Naveen	Omprakash
$\frac{1}{4}$	$\frac{1}{8}$
2	1