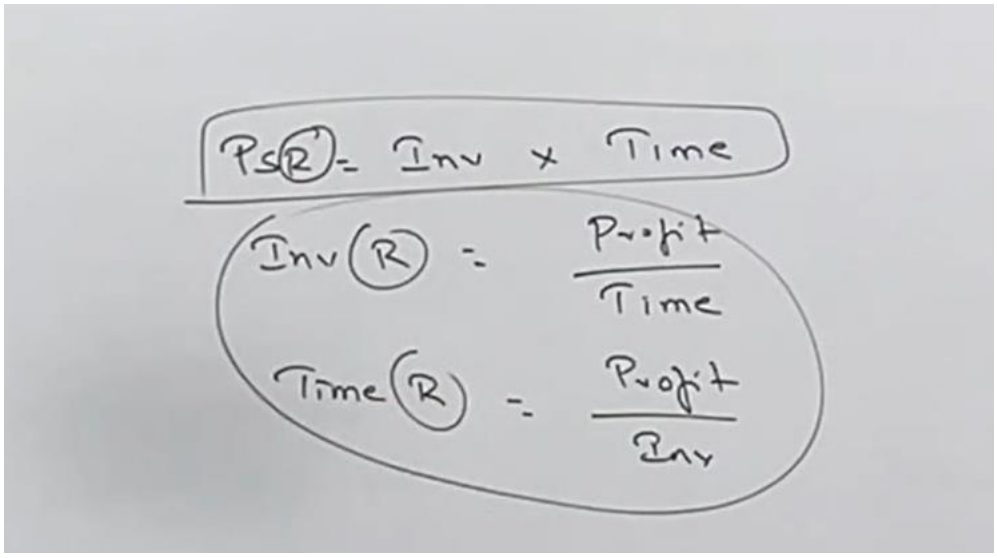
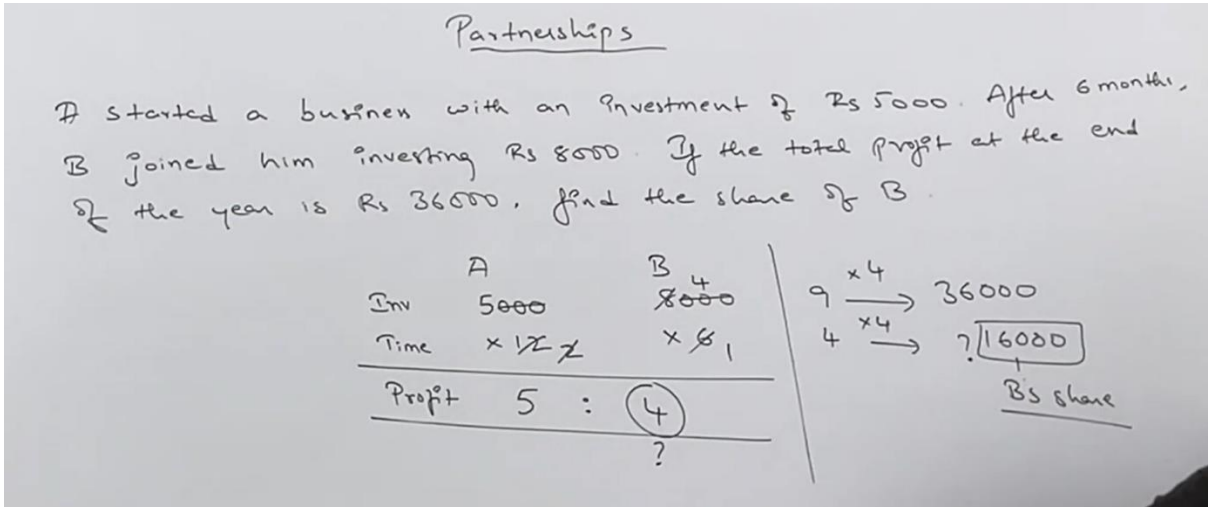
PATNERSHIP


P's (R) = Inv × Time
Inv (R) = Profit / Time
Time (R) = Profit / Inv


Partnerships
A started a business with an investment of Rs 5000. After 6 months, B joined him investing Rs 8000. If the total profit at the end of the year is Rs 36000, find the share of B.
A
B
Inv
5000
8000
Time
× 12
× 6
Profit
5 : 4
?
× 4
9 → 36000
4 → ? 16000
B's share

Partnerships

Ajay, Vijay & Jai invested Rs 8000, Rs 4000 & Rs 8000 respectively in a Business. Ajay left after 6 months. At the end of 8 months, if there is a gain of Rs 4005, find the share of Vijay?

	A	V	J
Inv	~~8000~~	~~4000~~ 2	~~8000~~ 4
Time	× ~~6~~ 3	× ~~8~~	× ~~8~~
Profit	3 :	2 :	4

9 → 4005 (× 445)

2 → ? (× 445) = 890

Share of Vijay

Partnerships

Purna started a business with Rs 98000. After 4 months, Vishal joined the business with a capital of Rs 63000. Find the total profit, if profit shared by Vishal at the end of the year was Rs 15000?

	P	V
Inv	~~98000~~ ~~49~~ 7	~~63000~~ ~~21~~ 3
Time	× ~~12~~ ~~3~~	× ~~8~~ ~~2~~
PSR	7 :	3

V → 3 → 15000 (×5)

Total → 10 → ? (×5) = 50000

Total Profit

Partnerships

Three partners start a business with 60,000/-, 40,000/- & 100000/- respectively. Find the ratio of their profits at the end of the Business.

Inv	~~60000~~ 3	~~40000~~ 2	~~100000~~ 5
Time	1	1	1
PSR	3 :	2 :	5

Partnerships

Three partners A, B & C put equal investments into a business for 1 year, 10 months & 6 months respectively. Find the profit sharing ratio at the end of a year.

	A	B	C
Inv	1	1	1
Time	12	10	6
PSR	6	5	3

Partnerships

3 partners Ramu, Krishna & Venkat start a business investing Rs 80000, Rs 60000 & Rs 50000 respectively. They continue in a business for 9 months, 8 months & 1 year respectively. Find their profit sharing Ratio at the end of one year.

	R	K	P
Inv	80000	60000	50000
Time	9	8	12
PSR	6	4	5

Partnerships

The capitals of 3 partners are in the ratio 5 : 2 : 3 and their Profit Sharing Ratio is 10 : 8 : 9. Find the ratio of Terms of their investment.

	A	B	C
Inv	5	2	3
Time	2	4	3
PSR	10	8	9

PSR = Inv x Time

$\Rightarrow$ Time R = $\frac{PSR}{IR}$

$= \frac{10}{5} : \frac{8}{2} : \frac{9}{3}$

Terms = 2 : 4 : 3

Partnerships

3 partners invest their capitals for time periods which are in the ratio 2 : 3 : 4 & they have shared the total profit in the ratio 5 : 4 : 3. Find the ratio of their respective capitals (investments)

	A	B	C
Inv	30	16	9
Time	2	3	4
PSR	5	4	3

$$Inv = \frac{PSR}{TR}$$

$$= \frac{5}{2} : \frac{4}{3} : \frac{3}{4}$$

$$= \frac{30 : 16 : 9}{12}$$

30 : 16 : 9 — Capital Ratio

2 | 2, 3, 4
1, 3, 2

Partnerships

A & B, being working & sleeping partners, start a business with Rs 5000 & Rs 8000 respectively. It is agreed to give 22% of total profit to A, for managing the business & the remaining is shared in the ratio of their capitals.

Find total Profit if A's share is Rs 2028.

Total
100 %
A — 22 %
Rem — 78 %

78%
A — B
5000 — 8000
5 : 8

13 — 78%
A 5 — 30%
B 8 — 48%

Total A's share = 22% + 30%
= 52%

52% — 2028
100% — 3900

$\frac{2028 \times 100}{52} = 3900/-$

Partnerships

M & N, two partners enter into a partnership with Rs 45000 & Rs 60000 respectively. 'M' acts as a managing partner, while 'N' is a sleeping partner. 'M' get 30% of total profit to manage the business & the remaining profit is shared in the ratio of their investments. Find the profit gained by 'M' if 'N' has gained Rs 19600.

7 —x10— 70%.

M − 3 —x10— 30%.

N − 4 —x10— 40%.

M's share = 30% + 30%.

M = 60%.

70%.

M : N

45000 : 60000

3 : 4

100%.

M − 30%.

70%.

N → 40%. — 19600

M → 60%. — ? 29400

9800 | 3

19600 × 3/2 = 29400

49

2

Partnerships

Two partners P & Q start a business with 1.50 lakhs & 1.20 lakhs respectively. But, after 8 months, 'Q' has withdrawn Rs 30,000 from the business. Find the total profit at the end of 1 year, if Q's share is Rs 44000.

Q → 11 —x4— 44000

Total − 26 —x4— 104000

	P	Q		
Inv	1,50,000	(1,20,000	− 30,000	) + (90,000
Time	× 12	× 8		× 4

PSR 1800000 : 960000 + 360000

= 180 : 132

90 : 66

48 : 33

15 : 11

Partnerships

A started a business with Rs 70000. After some months, B joined the business with Rs 60000. If the shared the total profit at the end of one year in the ratio 2 : 1, find after how many months B joined the business?

	A	B
Inv	70000	60000
Time	12	? (7)
PSR	2	: 1

5 months

$2 \xrightarrow{\times 2} 14$

$1 \xrightarrow{\times 7} 7$

⇒ B worked for 7 months

⇒ (12 − 7) = B joined after 5 months

Partnerships

A put 2/3 of capital & gets 3/4 of total Profit at the end of one year. If A invests for one year, find how long does B puts his capital?

	A	B
Inv	2	: 1
Time	×12	× ? 8 months
PSR	3	: 1

$3 \xrightarrow{\times 8} 24$

$1 \xrightarrow{\times 8} 8$

Inv

$A = \frac{2}{3}$

$\Rightarrow B = \frac{1}{3}$

$\rightarrow A : B$

$2 : 1$

Profit

$A = 3/4 \Rightarrow B = 1/4$

$A : B$

$3 : 1$