

# 100+ PARTNERSHIP QUESTIONS WITH SOLUTION

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1. The investment of A is twice as that of B and thrice as that of C. B invested for twice the months than A and thrice the months than C. Who will earn the highest profit?  
 A) B  
 B) C  
 C) A  
 D) Both A and B  
 E) Both B and C

**View Answer**

**Option D**

**Solution:**

Investment ratio 6:3:2

Month ratio 3:6:2

Then  $6 \times 3 : 6 \times 3 : 2 \times 2$

$18:18:4 \Rightarrow 9:9:2$

Both A and B gets equal and highest profits.

2. A, B and C start a business and their investments are in the ratio 4 : 3 : 6. Both A and B starts the business and C joins them after 6 months. It was decided that C will get a monthly salary of Rs 600 from the annual profits. C's total salary came out to be 10% of the annual profit after a year. What is the share of B in the total profits?  
 A) Rs8500  
 B) Rs9720  
 C) Rs9650  
 D) Rs10100  
 E) None

**View Answer**

**Option B**

**Solution:**

C's monthly salary Rs600.

Then annual salary =  $600 \times 6 = 3600$  (Because he work for 6 month only)

Rs3600 is 10% of total profit.

Then total profit is Rs36000.

Ratio of their shares  $4 \times 12 : 3 \times 12 : 6 \times 6$   
 $= 4:3:3$

Profit left after reducing salary of C =

$$36,000 - 3,600 = 32,400$$

$$B's \text{ share } \frac{3}{10} \times 32400 = \text{Rs}9720.$$

3. A, B and C started a business where their initial capital was in the ratio of 4:5:6. At the end of 8 months, A invested an amount such that his total capital became half to C's initial capital investment. If the annual profit of B is Rs. 7500 then what is the total profit ?  
 A) Rs22000  
 B) Rs18000  
 C) Rs20000  
 D) Rs19500  
 E) None

**View Answer**

**Option A**

**Solution:**

Initial Ratio 4:5:6

$$\text{Now, } 4 \times 8 + 3 \times 4 : 5 \times 12 : 6 \times 12$$

$$44:5 \times 12 : 6 \times 12 \Rightarrow 11:15:18.$$

B's share is Rs7500

ie 15 7500

$$(11+15+18)44 ? \Rightarrow 22000$$

4. P start a business with Rs. 10000, Q joins him after 2 month with 20% more investment than P, after 2 month R joins him with 40% less than Q. If the profit earned by them at the end of the year is equal to the twice of the difference between investment of P and ten times the investment of R. Find the profit of Q ?  
 A) Rs35500  
 B) Rs42000  
 C) Rs38000  
 D) Rs41100  
 E) None

**View Answer**

**Option C**

**Solution:**

$$P : Q : R = (10000 \times 12) : (12000 \times 10) : (7200 \times 8)$$

$$= 25 : 25 : 12$$

Now the Profit =  $2 \times (72000 - 10000) = 124000$

Q's share  $25/62 \times 12400 = \text{Rs} 50000$

Then profit of Q =  $50000 - 12000 = \text{Rs} 38000$ .

5. M and N are partners in a firm out of which M is sleeping partner and N is working partner. M invests Rs. 1,80,000 and N invests Rs. 90,000. N receives 14.5% of profit for managing the business and the rest is shared between both in ratio of their investments. M's share in the profit of Rs. 24000 is ?
- A) Rs10100  
B) Rs11500  
C) Rs12520  
D) Rs13680  
E) None

**View Answer**

**Option D**

**Solution:**

Profit received by N as working partner = 14.5% of Rs. 24000 = Rs. 3480

Balance in profit =  $24000 - 3480 = \text{Rs. } 20520$

Ratio of M and N =  $1,80,000 : 90,000 \Rightarrow 2:1$

Then M's share  $3 \times 20520$

2 ? Rs13680

6. Naveen and Kannan jointly started a business. Naveen invested four times as Kannan did and invested his money for double time as compared to Kannan. Kannan earned Rs. 5400. Then the total gain was ?
- A) Rs45000  
B) Rs48600  
C) Rs52000  
D) Rs55500  
E) None

**View Answer**

**Option B**

**Solution:**

Investments ratio is = 4:1

Time period ratio is = 2:1

Gain ratio of Naveen and Kannan = 8:1

Kannan got Rs. 5400,

1 5400

9 ?  $\Rightarrow \text{Rs} 48600$

The total gain = Rs48600

7. A & B partner in a business , A contribute 1/4 of the capital for 15 months & B received 2/3 of the profit . For how long B's money was used
- A) 8  
B) 6  
C) 10  
D) 7  
E) None

**View Answer**

**Option C**

**Solution:**

B received 2/3 of the profit

A : B = 1 : 2

Let the total capital = x

Then A's capital =  $x/4$

B's capital =  $x - x/4 = 3x/4$

If B's money was used for a months

Then A:B =  $(x/4) \times 15 : (3x/4) \times a = 1 : 2$

$15/4 : 3b/4 = 1 : 2$

$15 : 3b = 1 : 2$

$5 : b = 1 : 2$

$a = 5 \times 2 = 10$

8. X, Y and Z enter into a partnership and theirs shares are in the ratio 1/2 : 1/3 : 1/4. After two months, X withdraws half of his capital and after 10 months, a profit of Rs.420 is divided among them. What is Y's share?
- A) Rs180  
B) Rs165  
C) Rs 160  
D) Rs195  
E) None

**View Answer**

**Option C**

**Solution:**

Ratio of initial investments =  $1/2 : 1/3 : 1/4$   
 $= 6 : 4 : 3$ .

Let their initial investments be  $6x$ ,  $2x$  and  $3x$  respectively.

Ratio  $(6x * 2) + (3x * 10) : (4x * 12) : (3x * 12)$

$= 42 : 48 : 36 \Rightarrow 7 : 8 : 6$ .

B's share =  $420 * 8/21 = \text{Rs. } 160$ .

9. If  $8 (P's \text{ Capital}) = 10 (Q's \text{ Capital}) = 12 (R's \text{ Capital})$ , then out of the total profit of Rs 2590, R will receive ?

A) Rs. 740  
 B) Rs. 630  
 C) Rs. 840  
 D) Rs. 730  
 E) None

#### View Answer

##### Option C

##### Solution:

$$8p = 10q = 12r$$

$$4p = 5q = 6r$$

$$q = 4p/5$$

$$r = 4p/6 = 2p/3$$

$$P : Q : R = p : 4p/5 : 2p/3$$

$$15:12:10$$

$$R's \text{ share} = 2590 * (12/37) = 70 * 12 = \text{Rs. } 840.$$

10. P and Q invested in a business. They earned some profit which they divided in the ratio of 2:3. If P invested Rs.30000, the amount invested by Q is

A) Rs 40000  
 B) Rs 35000  
 C) Rs 45000  
 D) Rs 50000  
 E) None

#### View Answer

##### Option C

##### Solution:

$$30,000:Q = 2:3$$

$$Q = 90,000/2 = 45,000$$

1. Sam and Suresh start a business with investments of Rs. 5000 and Rs. 3000 respectively. After 2 months, Sam takes out Rs.2000 from his capital. After 1 more month, Suresh takes out Rs.2000 of his capital while Sunil joins them with a capital of Rs. 6000. At the end of 9 months from the start, they earn a total profit of Rs. 4920. Which of the following is the share of each member respectively in the profit?

A) Rs. 1860, Rs. 900, Rs. 2160  
 B) Rs. 15000, Rs. 850, Rs. 2300  
 C) Rs. 1650, Rs. 800, Rs. 1895  
 D) Rs. 1700, Rs. 860, Rs. 2150  
 E) None of these

#### View Answer

##### Option A

##### Solution:

Their investing ratio:

$$(5000*2 + 3000*7) : (3000*3 + 1000*6) : (6000*6)$$

$$= (30000):(15000):(36000) = 31:15:36$$

Total profit for 9 months = Rs.4920

Therefore,  $(31+15+36)82 = 4920$

Sam's share 31 ? = Rs.1860

Suresh's share 15 ? = Rs900

Sunil's share 36 ? = Rs2160

2. Edwin started a business with Rs.25000 and after 4 months, Thomas joined him with Rs.60000. Edwin received Rs.58000 including 10% of profit as commission for managing the business. What amount did Thomas receive?.

A) Rs 80,000  
 B) Rs 72,000  
 C) Rs 65,000  
 D) Rs 82,000  
 E) None

#### View Answer

##### Option B

##### Solution:

Profit sharing ratio is

$$25000*12 : 60000*8 = 5:8$$

Total profit 100%

Edwin got 10% for Managing the business so remaining 90% is shared by both.

Edwin got 10%profit +  $\frac{5}{13} \times 90\%$ profit

$$0.1p + \frac{5}{13} \times (0.9p) = 58,000$$

$$\text{Then } 5.8p/13 = 58000 \implies p = 1,30,000.$$

Now Thomas profit is 1,30,000 -

$$58,000 = 72,000.$$

3. P, Q and R start a business with Rs30,000, Rs40,000 Rs50,000 respectively. P stays for the entire year. Q leaves the business after two months but rejoins after another 4 months but only  $\frac{3}{4}$  of his initial capital. R leaves after 3 months and rejoins after another 5 months but with only  $\frac{4}{5}$  of his capital. If the year end profit is Rs 27,900, how much more than Q did R get?
- A) Rs1500  
B) Rs9300  
C) Rs3100  
D) Rs12,400  
E) None

#### View Answer

##### Option A

##### Solution:

Their ratio's  $30000 \times 12$ :

$$(40000 \times 2 + 30000 \times 6) : (50000 \times 3 + 40000 \times 4)$$

$$36:26:31$$

Total profit is Rs 27900

$$\text{Then } (36+26+31) 93 == 27900$$

$$\text{Diff of Q-R } (31-26) 5 ? \implies \text{Rs}1500$$

4. A starts a business with Rs.40,000. After 2 months, B joined him with Rs.60,000. C joined them after some more time with Rs.1,20,000. At the end of the year, out of a total profit of Rs.3,75,000, C gets Rs.1,50,000 as his share. How many months after B joined the business, did C join?
- A) 5  
B) 8  
C) 6  
D) 10  
E) None

#### View Answer

##### Option C

##### Solution:

$$40000 \times 12 : 60000 \times 10 : 120000 \times x = 40$$

$$\times 12 : 60 \times 10 : 120 \quad x = 40 : 5 \times 10 : 10x = 8$$

$$: 10 : 2x = 4 : 5 : x$$

$$\text{C's share } 375000x/(9+x) = 150000$$

$$375x/(9+x) = 150$$

$$X = 6$$

5. M started a business with Rs.25,000. N joined him after 4 months with Rs20,000. After 2 more months, M withdrew Rs.10,000 of his capital and 2 more months later, N brought in Rs.10,000 more. What should be the ratio in which they should share their profits at the end of the year?
- A) 2:3  
B) 5:6  
C) 4:7  
D) 5:4  
E) None

#### View Answer

##### Option D

##### Solution:

Their Ratio's

$$(25000 \times 6 + 15000 \times 6) : (20000 \times 4 + 30000 \times 4)$$

$$150+90:80+120=240:200 = 5:4$$

6. A, B, C started a business with their investments in the ratio 3:6:5. After 8 months, A invested the same amount as before and both B and C withdrew half of their investments. The ratio of their profits at the end of the year is:
- A) 22:30:24  
B) 18:30:25  
C) 16:18:22  
D) 20:15:18  
E) None

#### View Answer

##### Option B

##### Solution:

$$\text{Investments: } 3x, 6x, 5x$$

$$A:B:C = 3x*8 + 3x*4 : 6x*8 + (6x/2)*4 : 5x*8 + (5x/2)*4$$

$$A:B:C = 18:30:25$$

7. Three friends A, B, C invested in a business in the ratio of 4:5:6. After 6 months C withdraw half of his capital. If the sum invested by A is 48000, then the profit earned by C out of the total profit of 60000.
- A) 20000  
B) 30000  
C) 25000  
D) 32000  
E) None

**View Answer****Option A****Solution:**

sum invested by A =  $4x = 48000$ .

$$X = 12000$$

Investment made by A, B, C – 48000, 60000, 72000

Ratio in which the profit will divide-  
 $48000*12 : 60000*12 : 72000*6 + 36000*6$

i.e 8:10:9. So C share =  $(9/27)*60000 = 20000$

8. M and N invested in a business in which M invest 250 rupee more than N. N invested for 6 months while M invested for 4 months. If M get 200 more than N out of a total profit of 1000. Then the total amount invested in the business.
- A) 550  
B) 650  
C) 750  
D) 850  
E) None

**View Answer****Option B****Solution:**

Let N invest 'x' rupees so M will invest  $(x+250)$

Total investment made by M =  $(x+250)*4$  and by N =  $6x$

According to the problem-  $[[4(x+250) - 6x]/(1000 + 10x)]*1000 = 200$ .

$$X = 200. \text{ Total investment} = 200 + 250 + 200 = 650$$

9. A, B and C enter into a partnership with a capital in which A's contribution is Rs. 15,000. If out of a total profit of Rs. 1000, A gets Rs. 500 and B gets Rs. 300, then C's capital is :
- A) 4000  
B) 5000  
C) 6000  
D) 7000  
E) None

**View Answer****Option C****Solution:**

$$A : B : C = 500 : 300 : 200 = 5 : 3 : 2.$$

Let their capitals be  $5x$ ,  $3x$  and  $2x$  respectively.

$$\text{Then, } 5x = 15000$$

$$\Rightarrow x = 3000.$$

$$C's \text{ capital} = 2x = \text{Rs. } 6000.$$

10. A, B, C rent a pasture. A puts 15 cows for 6 months, B puts 20 cows for 4 months and C puts 10 cows for 8 months for grazing. If the rent of the pasture is Rs. 500, how much must A pay as his share of rent?
- A) 200  
B) 250  
C) 300  
D) 180  
E) None

**View Answer****Option B****Solution:**

$$A:B:C = (15*6) : (20*4) : (10*8) = 9:8:8$$

$$A's \text{ rent} = (9/25) * 500 = \text{Rs. } 180$$



1. Radhika started a workshop with an investment of Rs.40,000. She invested additional amount of Rs.10,000 every year. After two years her sister Rama joined her with an amount of Rs.85,000. Therefore, Rama did not invest any additional amount. On completion of 4 years from the opening of workshop they earned an amount of Rs.1,95,000. What will be Radhika's share in the earning ?
- A) Rs.2,20,000  
B) Rs.1,10,000  
C) Rs.2,45,000  
D) Rs.3,35,120  
E) Rs.1,01,5000

**View Answer****Option B****Solution:**

Investment of Radhika = Rs. 40,000 + Rs. 50,000 + Rs. 60,000 + Rs. 70,000 = Rs. 2,20,000

Investment of Rama =  $85,000 \times 2$  = Rs. 1,70,000

Ratio = 22 : 17

Radhika's share =  $(\frac{22}{39}) \times 1,95,000$  = Rs.1,10,000

2. P, Q and R are partners in a business .P whose money has been used for 4 months , claims  $(\frac{1}{8})$  of the profit , Q whose money has been used for 6 months ,claims at  $(\frac{1}{3})$  of the profit . R had invested Rs. 1560 for 8 months .How much did P and Q contribute ?
- A) Rs.720, Rs.1280  
B) Rs.650, Rs.1100  
C) Rs.758, Rs.1500  
D) Rs.800, Rs.1720  
E) Rs.870, Rs.1750

**View Answer****Option A****Solution:**

P : Q : R  
 $[(960 \times 3)/4] : [(960 \times 8)/6] : [(1560 \times 8)/13]$   
 = 720 : 1280 : 960

3. There are two persons invests Rs.1,15,000 and Rs.1,00,000 resp. in a project and agree

that 50% of the profit should be divided equally between them and the remaining is to be treated as interest on the capital. If first person get Rs.500 more than the second person .What is the total profit made in the business ?

- A) Rs.1780.22  
B) Rs.15445.12  
C) Rs.21245  
D) Rs.14333.33  
E) Rs.14758.41

**View Answer****Option D****Solution:**

Ratio of the profit = 23:20

Therefore,

$500 \times (100/50) \times [(23+20)/(23-20)] = 14333.33$

4. Ramesh, Suresh and Mahesh started a business with the investment in the ratio 5:8:10 resp. After 1 year Mahesh withdraw 50% of his capital and Ramesh increased his capital by 80% of his investment . After 2 years in what ratio should the earned profit be distributed among Ramesh ,Suresh and Mahesh?
- A) 15:10:17  
B) 14:16:15  
C) 11:15:19  
D) 8:13:7  
E) 10:15:14

**View Answer****Option B****Solution:**

Ramesh :Suresh:Mahesh

$[(5 \times 12) + (9 \times 12)] : (8 \times 24) : [(10 \times 12) + (3 \times 12)] = 14:16:15$

5. Prabhu initiated his business with  $(\frac{1}{2})$  of the total capital for  $(\frac{1}{4})$ th of the time . His brother Sunny invests  $(\frac{1}{3})$  of the capital for  $(\frac{1}{2})$ th of the time and Prabhu's friend Tarun invests the remaining capital for the whole time. Find the share of Tarun in the total profit of Rs. 1,21,000.
- A) Rs.20,000  
B) Rs.24,500

- C) Rs.50,000  
D) Rs.33,420  
E) Rs.44,000

**View Answer****Option E****Solution:**

Tarun's contribution in the business =  $1 - [(1/2) + (1/3)] = 1/6$

Prabhu's share : Sunny's share : Tarun's share

$$(1/4) * (1/2) : (1/2) * (1/3) : (1/6) * 1$$

3:4:4

Tarun's share in profit =  $(4/11) * 1,21,000 = \text{Rs.}44,000$

6. A, B and C sharing profits in the ratio 3:2:2. B retired from the company and A and C decide to share profits in the ratio 3:2. What is the gaining ratio?
- A) 5:3  
B) 4:5  
C) 3:2  
D) 2:1  
E) 3:5

**View Answer****Option C****Solution:**

$$\text{Gaining ratio} = [(3/5) - (3/7)] : [(2/5) - (2/7)] = 3 : 2$$

7. Rs.61,105 is divided between Ram and Raman in the ratio 3 : 8. What is the difference between thrice the share of Ram and twice the share of Raman?
- A) Rs.52,500  
B) Rs.42,000  
C) Rs.35,720  
D) Rs.38,885  
E) Rs.47,200

**View Answer****Option D****Solution:**

$$\begin{aligned} \text{Required difference} &= [(8/11) * 2 - (3/11) * 3] * 61,105 \\ &= (7/11) * 61,105 = \text{Rs. } 38,885 \end{aligned}$$

8. Mr. X started a business investing Rs.25,000 in 1996. In 1997 he invested an additional amount of Rs. 10,000 and Mr. Y joined him with an amount of Rs.35,000. In 1998, Mr. X invested another additional amount of Rs.10,000 and Mr. Z joined them with an amount of Rs. 35,000. Find the share of Mr. Y in the profit of Rs. 1,50,000 earned at the end of 3 years from the start of the business in 1996?
- A) Rs.50,000  
B) Rs.80,000  
C) Rs.70,000  
D) Rs.40,000  
E) Rs.60,000

**View Answer****Option A****Solution:**

Mr. X : Mr. Y : Mr. Z

$$[(25000 * 3) + (10000 * 2) + (10000 * 1)] :$$

$$(35000 * 2) : (35,000 * 1)$$

$$105000 : 70000 : 35000$$

$$3 : 2 : 1$$

$$\begin{aligned} \text{Mr. Y's share in the profit} &= (2/6) * 1,50,000 \\ &= \text{Rs. } 50,000 \end{aligned}$$

9. A starts a business with an initial investment of Rs. 30,000. After 6 months, B enters into the partnership with an investment of Rs. 20,000. Again after 3 months C enters with an investment of Rs.50,000. If C receives Rs. 2000 in the profit at the end of the year, what is the total annual profit?
- A) Rs.7000  
B) Rs. 8400  
C) Rs.8000  
D) Rs.9000  
E) RS.8500

**View Answer****Option B****Solution:**

A, B and C's equivalent capitals

A : B : C

$$(30,000 * 12) : (20,000 * 6) : (50,000 * 3)$$

$$12 : 4 : 5$$

$$\text{C's profit} = 5x/12 = 2000$$

$$\Rightarrow x = 8,400$$



10. Riya started a project by investing Rs. 60,000. 6 months later her sister Riama joins her by investing Rs. 1,00,000. At the end of 1 year from the commencement of the business, they earn a profit of Rs. 27,038. Find Riama's share in the profit?
- A) Rs. 14,150  
B) Rs. 13,100  
C) Rs. 13,560  
D) Rs. 12,290  
E) Rs. 12,510

**View Answer****Option D****Solution:**

Riya and Raima's capital in the ratio  
 $= (60,000 \times 12) : (1,00,000 \times 6)$   
 $= 5 : 6$   
 Therefore, Raima's share in the profit =  
 $(5/11) \times 27,038 = 12,290$

1. Kartik, Bhuvan and Sid entered into a partnership and invested Rs 13,000, Rs 16,000 and Rs 19,000 respectively. After 7 months, Kartik and Bhuvan added Rs 1,000 and Rs 5,000 respectively while Sid withdrew Rs 5,000. If at the end of year their annual profit is Rs 43,160, find the total profit share of Kartik and Sid.
- A) Rs 28,030  
B) Rs 27,190  
C) Rs 26,830  
D) Rs 28,420  
E) Rs 27,040

**View Answer****Option E****Solution:**

Karti : Bhuvan : Sid  
 $13000 \times 7 + 14000 \times 5 : 16000 \times 7 + 21000 \times 5 : 19000 \times 7 + 14000 \times 5$   
 $23 : 31 : 29$   
 So required share =  $(23+29)/(23+31+29) \times 43160 = \text{Rs } 27,040$

2. Megha, Isha and Rani entered into a partnership by investing Rs 20,000, Rs X, and Rs 22,000 respectively for 6 months, 8

months and 10 months respectively. If Isha earns a profit of Rs 16500 out of a total profit of Rs 44,550, find the total investment done by all three.

- A) Rs 47,000  
B) Rs 25,000  
C) Rs 54,000  
D) Rs 39,000  
E) Rs 67,000

**View Answer****Option E****Solution:**

Megha : Isha : Rani  
 $20000 \times 6 : X \times 8 : 22000 \times 10$   
 $30000 : 2X : 55000$   
 $15000 : X : 27500$   
 So  $X/(15000+X+27500) \times 44550 = 16500$   
 Gives  $X/(15000+X+27500) \times 270 = 100$   
 Solve,  $X = 25,000$   
 So total investment =  $20+25+22 = 67,000$

3. Kamya, Prisha and Tisha started a business by investing Rs X, Rs (X+400) and Rs (X-200). If after the end of year, total share of profit of Kamya and Tisha is Rs 8100 out of a total profit of Rs 13,500, find the profit share of Prisha.
- A) Rs 6100  
B) Rs 5400  
C) Rs 5100  
D) Rs 6600  
E) Rs 5500

**View Answer****Option B****Solution:**

Kamya : Prisha : Tisha  
 $X : (X+400) : (X-200)$   
 So  $(X+X-200)/(X + X+400 + X-200) \times 13500 = 8100$   
 Solve,  $X = 1600$   
 So ratio of profit share is  
 $1600 : 2000 : 1400 = 8 : 10 : 7$   
 So profit share of Prisha =  $10/25 \times 13500 = \text{Rs } 5400$

4. Preeti, Anu and Aarti entered into a business. Preeti invested Rs 2500 for some months, Anu invested Rs 3000 for 2 more

months than Preeti and Aarti invested Rs 3500 for 3 months less than Anu. If Anu got Rs 8400, out of a total profit of Rs 19,000, then Aarti invested her money for how many months?

- A) 3 months
- B) 5 months
- C) 4 months
- D) 6 months
- E) 2 months

#### View Answer

#### Option C

#### Solution:

Preeti : Anu : Aarti

$$25000 * x : 3000 * (x+2) : 3500 * (x-1)$$

$$5x : 6(x+2) : 7(x-1)$$

$$\text{So } (6x+12)/(5x + 6x+12 + 7x-7) * 19000 = 8400$$

$$\text{Solve, } x = 5$$

So Aarti invested money for 4 months

**Directions (5-7):** A, B and C started a business by investing Rs 800, Rs 1600 and Rs 2000 respectively. After a quarter they invested amounts in a ratio 1 : 4 : 2. After another quarter, they invested amounts in ratio 3 : 2 : 3. In the last quarter the ratio of investments was same as in 2<sup>nd</sup> quarter. Also in the last quarter, the respective amounts of A, B and C was double than the respective amounts invested in 2<sup>nd</sup> quarter. The total investment of C before 4<sup>th</sup> quarter was Rs 1400 more than that of A during same duration. Also ratio of B's share in profit to total profit at the end of year was 66 : 153.

5. Find the total investment of A, B and C.
- A) Rs 10,200
  - B) Rs 11,300
  - C) Rs 9,800
  - D) Rs 10,080
  - E) Rs 11,090

#### View Answer

#### Option A

#### Solution:

Quarters means 3 months each

Ratio of investments in 2<sup>nd</sup> quarter – 1 : 4 : 2, so let amounts – x, 4x, 2x

Ratio of investments in 3<sup>rd</sup> quarter – 3 : 2 : 3, so let amounts – 3y, 2y, 3y

In last quarter, respective amount is double then in 2<sup>nd</sup> quarter, so amounts – 2x, 8x, 4x

**In the last quarter the ratio of investments was same as in 2<sup>nd</sup> quarter.**

— **this is not required to solve question.**

Given:

$$(2000 + 2x + 3y) = 1400 + (800 + x + 3y)$$

Solve, x = Rs 200

Now ratio of profit share — A : B : C is

$$800 * 3 + x * 3 + 3y * 3 : 1600 * 3 +$$

$$4x * 3 + 2y * 3 + 8x * 3 : 2000 * 3 + 2x * 3 +$$

$$3y * 3 + 4x * 3$$

3 gets cancelled, gives

$$(800 + 3x + 3y) : (1600 + 12x + 2y) :$$

$$(2000 + 6x + 3y)$$

Put x = 200 gives

$$1400 + 3y : 4000 + 2y : 3200 + 3y$$

Now given

$$(4000 + 2y) / (1400 + 3y + 4000 + 2y +$$

$$3200 + 3y) = 66 / 153$$

$$(2000 + y) / (4300 + 4y) = 22 / 51$$

Solve, y = Rs 200

So now the total investment is—

$$(800 + 3x + 3y) + (1600 + 12x + 2y) +$$

$$(2000 + 6x + 3y) = (4400 + 21x + 8y)$$

$$\text{put } x = 200, y = 200, \text{ total investment} = \text{Rs } 10,200$$

6. If they respectively had invested same amounts in each quarter after quarter 1 which is equal to their respective investments in quarter 1, then what would be the profit of A at the end of year out of a total profit of Rs 19,350?
- A) Rs 2510
  - B) Rs 3320
  - C) Rs 2560
  - D) Rs 3150
  - E) None of these

#### View Answer

#### Option D

#### Solution:

800, 1600, 2000 as it is for 3 months, and then for next 9 months x, 4x and 2x

So ratio of profit share – A : B : C is

$$800 * 3 + 200 * 9 : 1600 * 3 + 800 * 9 : 2000 * 3 + 400 * 9$$

7 : 20 : 16

So profit share of A =  $\frac{7}{43} \times 19350 = \text{Rs } 3150$

7. If the respective investments in third quarter was changed and this was in ratio 2 : 4 : 1 (other investments being the same), then what would be the total investment of all three in third quarter, if the average investment of all A B and C was Rs 3100 for whole year?
- A) Rs 700  
B) Rs 800  
C) Rs 500  
D) Rs 900  
E) None of these

**View Answer**

**Option A**

**Solution:**

New investments – 3z, 2z, and 2z

Investment of A =  $(800+3x+2z)$ , B =  $(1600+12x+4z)$  and C =  $(2000+6x+1z)$

Put  $x = 200$

A =  $1400+2z$ , B =  $4000+4z$ , C =  $3200+1z$

Now given  $(1400+2z + 4000+4z + 3200+1z)/3 = 3100$

Solve,  $z = \text{Rs } 100$

So total investment for quarter 3 =  $2z+4z+z = 7z = \text{Rs } 700$

**Directions (8-10):** A, B and C started a business. They invested amounts in the ratio 1 : 3 : 2 respectively for 8 months. After this they invested amounts in ratio 2 : 3 : 4 respectively for 4 months. The average investment of A and B is Rs 2800 while average investment of B and C is Rs 3800.

8. Find the total investment of C?
- A) Rs 4000  
B) Rs 5000  
C) Rs 6000  
D) Rs 4500  
E) Rs 3500

**View Answer**

**Option A**

**Solution:**

A : B : C is

$x*8 + 2y*4 : 3x*8 + 3y*4 : 2x*8 + 4y*4$   
gives  $(2x+2y) : (6x+3y) : (4x+4y)$

Given::

$(x+2y+3x+3y)/2 = 2800$

$4x+5y = 5600$

Also  $(3x+3y+2x+4y)/2 = 3800$

$5x+7y = 7600$

Solve both equations,  $x = 400$ ,  $y = 800$

So total investment of C =  $(2x+4y) = \text{Rs } 4000$

9. If B's investment for both the terms (4 months and 8 months) was swapped, then find the total profit share of B and C if annual profit is Rs 46,200.
- A) Rs 45,600  
B) Rs 32,800  
C) Rs 43,600  
D) Rs 37,800  
E) None of these

**View Answer**

**Option D**

**Solution:**

B's investment for 8 months =  $3x = 3*400 = \text{Rs } 1200$  and for 4 months =  $3y = 3*800 = \text{Rs } 2400$

Now swapped, means for 8 months = Rs 2400 and for 4 months is Rs 1200

So now ratio of A : B : C is

$400*8 + 1600*4 : 2400*8 + 1200*4 : 800*8 + 3200*4$

2 : 5 : 4

So required profit =  $(5+4)/(2+5+4) * 46200 = \text{Rs } 37,800$

10. If A's share in annual profit is Rs 9030, find the total profit after a year.
- A) Rs 41,390  
B) Rs 45,150  
C) Rs 42,610  
D) Rs 46,240  
E) Rs 43,170

**View Answer**

**Option B**

**Solution:**

Ratio of profit share is

$(2x+2y) : (6x+3y) : (4x+4y)$

$x = 400$ ,  $y = 800$

So ratio becomes

1 : 2 : 2

So  $1/5 * x = 9030$

Total profit =  $x = \text{Rs } 45,150$

1. A and B enter into a partnership with capitals in the ratio 7:8 and at the end of 8 months A withdraws. If they receive profits in the ratio of 7:11 find how long B's capital was used?  
 A) 8 months  
 B) 9 months  
 C) 11 months  
 D) 12 months  
 E) None of these

**View Answer**

**Option C**

**Solution:**

A : B

7 : 8

8 : x (time)

$7*8 : 8*x = 7 : 11$

$56/8x = 7/11$

$x = 11$

2. A began a business with Rs 12,000 and was joined afterwards by B with Rs 8,000. After how many months did B join if the profits at the end of the year were divided in the ratio 3:1?  
 A) 5 months  
 B) 6 months  
 C) 7 months  
 D) 8 months  
 E) None of these

**View Answer**

**Option B**

**Solution:**

$12000*12:8000*(12-x)=3:1$

solve  $x = 6$  months

3. Two partners invest Rs 120000 and Rs 84000 in a business and agree that 70% of

the profit should be divided equally between them and the remaining profit is to be treated as interest on capital. If one person gets Rs 900 more than the other then find the total profit made in the business.

- A) Rs 17,000  
 B) Rs 20,000  
 C) Rs 5,100  
 D) Rs 18,000  
 E) None of these

**View Answer**

**Option S**

**Solution:**

$120000*1 : 84000*1$

10: 7 (difference = 3)

3 == 900

1 == 300

17 == 5100 ; this is 30%

$100\% = 5100 * 100 / 30 = 17,000$

4. A, B and C enter into a partnership with Rs 4000, Rs 6000 and Rs 8000 respectively. After 4 months A withdrew 25% and after 6 months B add  $16(2/3)\%$  and after 8 months C withdrew 25% , find the profit earned by A if they get a total profit of Rs 7500 after 1 year.  
 A) Rs 1000  
 B) Rs 2000  
 C) Rs 3000  
 D) Rs 4000  
 E) None of these

**View Answer**

**Option B**

**Solution:**

A	:	B	:
C			
$4000*4$		$6000*6$	
$8000*8$			
$(4000-1000)*8$		$(6000+1000)*6$	$(8000-2000)*4$
$= 40000$	:	$78000$	:
$20:39:16$			

$$A = 20/(20+39+16) * 7500 = 2000$$

5. A starts a business with Rs 25000. After few months B join him with Rs 20000. If the ratio of their profit after 1 year is 15:8 find after how many months B joined A?
- A) 2 months  
B) 6 months  
C) 4 months  
D) 8 months  
E) None of these

**View Answer**

**Option C**

**Solution:**

$$25000 * 12 : 20000(12-x)$$

$$15 : 8$$

solve and get  $x=4$  months

6. A invests with B some rupees and B invested Rs 25,000. After 4 months A increase his investment with Rs 6000. If at the end of the year A and B have a profit of Rs 2400 and Rs 2500 respectively, find the sum invested by A.
- A) Rs 15000  
B) Rs 30000  
C) Rs 25000  
D) Rs 20000  
E) None of these

**View Answer**

**Option D**

**Solution:**

$$[x * 4 + (x+6000) * 8] / (25000 * 12) = 24/25$$

solve and get  $x=$  Rs 20000

7. Ram and Shyam invested Rs 5000 and Rs 7000 respectively. If Ram increases Rs 1000 after every 4 months find the ratio of their profit after 1 year.
- A) 7 : 6  
B) 6 : 7  
C) 5 : 6  
D) 6 : 5  
E) None of these

**View Answer**

**Option B**

**Solution:**

$$\begin{aligned} A & : B \\ 5000 * 4 & : 7000 * 12 \\ + 6000 * 4 & \\ + 7000 * 4 & \\ = 72000 & : 84000 \\ 6 & : 7 \end{aligned}$$

8. In a partnership A invest  $1/6$  of the capital for  $1/6$  of the time. B invest  $1/3$  capital for  $1/3$  time and C invest the remaining capital for whole time. If at the end of the year the profit earned is Rs 23000, Then what will be the share of B?
- A) Rs 4000  
B) Rs 5000  
C) Rs 6000  
D) Rs 4500  
E) None of these

**View Answer**

**Option A**

**Solution:**

$$\text{Let total capital} = 18$$

$$A = 1/6 * 18 * 1/6 * 12 = 6$$

$$B = 1/3 * 18 * 1/3 * 12 = 24$$

$$C = 9 * 12 = 108$$

$$A:B:C = 1:4:18$$

$$B = 4/23 * 23000 = 4000$$

9. Sumit and Anu invested money in the ratio of 8:12, find for how much time anu invested the money if Sumit invested money for 9 months and he got Rs 1000 from a total profit of Rs 3000?
- A) 9 months  
B) 10 months  
C) 11 months  
D) 12 months  
E) None of these

**View Answer**

**Option D**

**Solution:**

Sumit : Anu

$8*9 : 12*x$

$72:12x$

Profit=1000:2000=1:2

$72/12x=1/2$

$x=12$

10. A and B invested Rs 1200 and Rs 1500 respectively in a business. After 8 months A withdrew his entire money and C joined them with Rs 2000. If after a year, a total of Rs 1780 is obtained as a profit, find the total share of B and C?
- A) Rs 1300  
B) Rs 1280  
C) Rs 880  
D) Rs 980  
E) None of these

**View Answer**

**Option A**

**Solution:**

$$\begin{aligned} A & : B : C \\ 1200*8 & : 1500*12 : 2000*4 \\ = 24:45:20 \\ B+C & = 65/89*1780 \end{aligned}$$

1. Antra and Manvi invested Rs 3780 and Rs 3960 in a business. After 3 months, Antra withdrew Rs 420 and Manvi withdrew Rs 180. At the same time Chetna joined them by investing Rs 4620. After a year, they made a profit of Rs 35,850. Find Manvi's share in the annual profit.
- A) Rs 13,450  
B) Rs 12,750  
C) Rs 12,350  
D) Rs 13,650  
E) Rs 13,950

**View Answer**

**Option B**

**Solution:**

$$\begin{aligned} \text{Ratio of shares of Antra : Manvi : Chetna is} \\ 3780*3 + 3360*9 : 3960*3 + 3780*9 + \\ 4620*9 \end{aligned}$$

$77 : 85 : 77$

So Manvi's share =  $85/(77+85+77) * 35850 = \text{Rs } 12,750$

2. Shikha and Shreya invested in the ratio 7 : 8 in a business. They got an annual profit of Rs 34,450. If Shikha withdrew her entire money at the end of 9 years, then what is the difference between their shares of profit?
- A) Rs 7570  
B) Rs 6400  
C) Rs 7560  
D) Rs 7150  
E) Rs 8180

**View Answer**

**Option D**

**Solution:**

Ratio of shares of profit of Shikha : Shreya is

$7*9 : 8*12$

$21 : 32$

So difference in shares =  $(32-21)/(21+32) * 34450 = \text{Rs } 7150$

3. Kashish and Sheena started a business by investing Rs 2600 and Rs 2400 respectively. After 7 months, they added Rs 600 and Rs 800 respectively. 33% of the total profit earned after a year is given in donation. If after giving donation, the difference between the shares of Kashish and Sheena is Rs 350, find the total profit earned after a year.
- A) Rs 17,000  
B) Rs 25,000  
C) Rs 18,000  
D) Rs 12,000  
E) Rs 27,000

**View Answer**

**Option B**

**Solution:**

Ratio of shares of profit of Kashish : Sheena is

$$2600*7 + 3200*5 : 2400*7 + 3200*5$$



171 : 164

So  $(171-164)/(171+164) * x = 350$

Solve,  $x = \text{Rs } 16750$

So  $(100-33)\%$  of  $y$  (total profit) = 16750

Solve,  $y = \text{Rs } 25000$

4. Karuna and Varuna invested Rs 2400 and Rs  $x$  in a business. After 3 months, Karuna added Rs 600 while Varuna withdrew Rs 300. After a year out of a total profit of Rs 36,920, Varuna received Rs 17,160. Find the amount invested by Varuna at the starting of business.
- A) Rs 2700  
B) Rs 1900  
C) Rs 2100  
D) Rs 2400  
E) Rs 1600

**View Answer**

**Option A**

**Solution:**

Ratio of shares of Karuna and Varuna is  $2400*3 + 3000*9 : x*3 + (x-300)*9$  gives  $11400 : (4x-900)$

So  $(4x-900)/(11400+4x-900) * 36920 = 17160$

Solve,  $x = \text{Rs } 2700$

5. Vijay and Ajay started a business by investing Rs 2000 and Rs 1500 respectively. 4 months after start, Vijay withdrew all his money and Amit joined Ajay by investing Rs 3000. After the end of year, the difference between the shares of Amit and Vijay together and Ajay is Rs 3423. What is the total profit after a year?
- A) Rs 12375  
B) Rs 13455  
C) Rs 14265  
D) Rs 14350  
E) Rs 12225

**View Answer**

**Option E**

**Solution:**

Ratio of shares of Vijay : Ajay : Amit is  $2000*4 : 1500*12 : 3000*8$

4 : 9 : 12

$[(12+4)-9]/(4+9+12) * x = 3423$

Solve,  $x = \text{Rs } 12225$

6. Tiya and Piya invested Rs 1350 and Rs 1800 respectively in a business. After 9 months Piya withdrew her entire money and Riya and Siya joined the business by investing Rs 3000 and Rs 2700 respectively. If after a year, a total of Rs 13,750 is obtained as profit, find the total share of Piya and Riya together out of total profit.
- A) Rs 6000  
B) Rs 8000  
C) Rs 7000  
D) Rs 6500  
E) Rs 7500

**View Answer**

**Option C**

**Solution:**

Ratio of shares of Tiya : Piya : Riya : Siya is

$1350*12 : 1800*9 : 3000*3 : 2700*3$

$18 : 18 : 10 : 9$

So (B+C) got  $= (18+10)/(18+18+10+9) * 13750 = \text{Rs } 7000$

7. Veena, Meena and Teena started a business by investing Rs 7000, Rs 7500 and Rs 6500 respectively for 4 months. After 4 months Veena and Teena added same amount as before while Teena invested Rs 7000 for 8 months. If after this the profit earned was Rs 44,800, find the share of Teena.
- A) Rs 15,380  
B) Rs 14,440  
C) Rs 13,520  
D) Rs 14,350  
E) Rs 13,380

**View Answer**

**Option D**

**Solution:**

Ratio of shares Veena : Meena : Teena is

$7000 \times 12 : 7500 \times 12 : 6500 \times 4 + 7000 \times 8$   
 $42 : 45 : 41$   
 So share of Teena is  $41/(42+45+41) \times 44800 = \text{Rs } 14,350$

8. Vanya and Tanya started a business by investing Rs 1750 and Rs 2100 respectively. 5 months later, Tanya withdrew her entire money and Sanya and Manya joined the business with investments of Rs 4000 and Rs 6500 respectively. If after a year difference in total shares of Sanya and Manya together and total shares of Vanya and Tanya together is Rs 6,720, find the total profit.
- A) Rs 16,900  
 B) Rs 16,800  
 C) Rs 15,100  
 D) Rs 15,300  
 E) Rs 16,300

**View Answer****Option B****Solution:**

Ratio of shares Vanya : Tanya : Sanya : Manya is  
 $1750 \times 12 : 2100 \times 5 : 4000 \times 7 : 6500 \times 7$   
 $25 \times 12 : 30 \times 5 : 400 : 650$   
 $12 : 6 : 16 : 26$   
 $6 : 3 : 8 : 13$   
 $[(8+13)-(6+3)]/(6+3+8+13) \times x = 6720$   
 Solve,  $x = \text{Rs } 16,800$

9. Sumit and Rumi started a business by investing Rs 7200 and Rs 6400 respectively. After 6 months, Sumit withdrew half and Rumi withdrew  $1/4$ th of their respected money invested. If after a year, a total profit of Rs 19,800 is made, what is the share of Sumit?
- A) Rs 8480  
 B) Rs 9490  
 C) Rs 9720  
 D) Rs 8150  
 E) Rs 9220

**View Answer****Option C****Solution:**

Rumi withdrew  $1/4$ th so remained money is  $3/4$ th of 6400  
 Ratio of shares of profit of Sumit : Rumi is  
 $7200 \times 6 + 3600 \times 6 : 6400 \times 6 + 4800 \times 6$   
 $27 : 28$   
 Share of Sumit =  $27/(27+28) \times 19800 = \text{Rs } 9720$

10. Rohit, Lohit and Mohit started a business by investing in the ratio  $1/3 : 2/4 : 2/5$ . After 8 months Mohit withdrew  $1/2$  of his investment. If after 12 months from start of business Rohit and Lohit got a share of Rs 16,000 out of the total profit, then find the share of Mohit?
- A) Rs 7200  
 B) Rs 5700  
 C) Rs 6500  
 D) Rs 6400  
 E) Rs 4700

**View Answer****Option D****Solution:**

Investments of Rohit : Lohit : Mohit =  $1/3 : 1/2 : 2/5 = 10 : 15 : 12$   
 After 8 months Mohit withdrew  $1/2$ , so  $1/2 \times 12 = 6$ , so invested =  $12 - 6 = 6$  for another 4 months  
 So now ratio of shares of Rohit : Lohit : Mohit is  
 $10 \times 12 : 15 \times 12 : 12 \times 8 + 6 \times 4$   
 $2 : 3 : 2$   
 Let  $x$  is total profit. So  $(2+3)/(2+3+2) \times x = 16000$   
 $x = 22400$   
 So share of Mohit =  $2/7 \times 22400 = \text{Rs } 6400$

- A and B invested in a business in ratio 7 : 6. After 7 months, C joined them with double the investment made by B. If A and C together got Rs 2380 from the total profit after a year, what was the annual profit?
- A) Rs 3430  
 B) Rs 2880  
 C) Rs 2920  
 D) Rs 3570

E) Rs 3850

### View Answer

#### Option D

#### Solution:

Investment of A =  $7x$ , B =  $6x$ . So that of C =  $2 \times 6x = 12x$

So ratio of A : B : C is

$$7x \times 12 : 6x \times 12 : 12x \times 5$$

$$7 : 6 : 5$$

Let annual profit = Rs  $x$ . So

$$(7+5)/(7+6+5) \times x = 2380$$

$$\text{So } x = \text{Rs } 3570$$

□ A invested Rs 5000 in a business. After 4 months B joined him by investing Rs 4800. After a further of 2 months, C joined them with Rs 5200. If after the end of year, they earned a total profit of Rs 14,400, then what is the difference between the shares of A and B?

- A) Rs 2570
- B) Rs 2400
- C) Rs 2560
- D) Rs 2500
- E) Rs 2000

### View Answer

#### Option B

#### Solution:

Ratio of shares of profit of A : B : C is

$$5000 \times 12 : 4800 \times 8 : 5200 \times 6$$

$$50 \times 12 : 48 \times 8 : 52 \times 6$$

$$25 : 16 : 13$$

$$\text{So difference in shares of A and B} = (25 - 16)/(25 + 16 + 13) \times 14400 = \text{Rs } 2400$$

□ A, B and C invested in ratio  $1/2 : 3/4 : 2/3$ . After 6 months C withdrew his  $1/4$ th investment. If after 8 months A and B got a share of Rs 16,000 out of the total profit, then find the share of C?

- A) Rs 7,000
- B) Rs 8,000
- C) Rs 8,400
- D) Rs 7,800
- E) Rs 7,300

### View Answer

### Option B

#### Solution:

Investments of A : B : C =  $1/2 : 3/4 : 2/3 = 6 : 9 : 8$

After 6 months C withdrew  $1/4$ th, so  $1/4 \times 8 = 2$ , so invested =  $8 - 2 = 6$  for another 6 months

So now ratio of shares of A : B : C is

$$6x \times 8 : 9x \times 8 : 8x \times 6 + 6x \times 2$$

$$4 : 6 : 5$$

Let  $x$  is total profit. So  $(4+6)/(4+6+5) \times x = 16000$

$$x = 1600 \times 15$$

$$\text{So share of C} = 5/15 \times 1600 \times 15 = \text{Rs } 8000$$

□ A total of Rs 84,000 is invested in a business. Investment of A is Rs 4000 less than that of B and B's investment is Rs 4000 less than that of C. If A invested his amount for 5 months and B and C each for 4 months, then out of total profit of Rs 63,000 what is the share of A?

- A) Rs 21,000
- B) Rs 19,980
- C) Rs 21,320
- D) Rs 15,250
- E) Rs 22,250

### View Answer

#### Option A

#### Solution:

Let C's investment is Rs  $x$ , then B's = Rs  $(x - 4000)$ , then A's = Rs  $(x - 4000 - 4000) = \text{Rs } (x - 8000)$

$$\text{So } (x - 8000) + (x - 4000) + (x) = 84000$$

$$\text{Solve, } x = 32,000$$

So ratio of shares of A, B and C is

$$24000 \times 5 : 28000 \times 4 : 32000 \times 4$$

$$15 : 14 : 16$$

$$\text{So A's share} = 15/(15+14+16) \times 63000 = \text{Rs } 21000$$

□ A invested Rs 5500 for 2 months more than B while B invested Rs 4000 for 1 month more than C who invested Rs 5600. If out of a total profit of Rs 6000, the difference in the shares of C and B is Rs 250 then find the time for which A invested the money.

- A) 5 months
- B) 7 months
- C) 9 months
- D) 8 months

E) 6 months

**View Answer****Option D****Solution:**

Let C invested money for x months, then B for (x+1) months and then A for (x+1+2) = (x+3) months

So ratio of shares of A : B : C is  
 $5500 \times (x+3) : 4000 \times (x+1) : 5600 \times x$

$55(x+3) : 40(x+1) : 56x$

Given

$(56x - 40x - 40) / (55x + 165 + 40x + 40 + 56x) \times 6000 = 250$

Solve,  $x = 5$

So A invested for  $5+3 = 8$  months

□ A invested Rs 25,300 for 7 months, B invested Rs 25,200 for 11 months and C invested Rs 27,500 for 7 months. Find the share of A and C together out of a total profit of Rs 33,600.

A) Rs 18,600

B) Rs 17,500

C) Rs 19,500

D) Rs 21,500

E) Rs 19,200

**View Answer****Option E****Solution:**

Ratio of shares of profit of A : B : C is

$25300 \times 7 : 25200 \times 11 : 27500 \times 7$

$23 \times 7 : 252 : 25 \times 7$

$23 : 36 : 25$

Total of profit of A and C is

$(23+25)/(23+36+25) \times 33600 = \text{Rs } 19,200$

□ In a business, A invested Rs 25,000 and B invested Rs 24,000. As his salary A got 1/50th of the total profit of Rs 60,000 after which the remaining amount was shared among A and B in the ratio of their shares in profit. Find the difference in the shares of both.

A) Rs 2,300

B) Rs 2,440

C) Rs 2,500

D) Rs 2,400

E) Rs 2,380

**View Answer****Option D****Solution:**

Ratio of shares A : B is

$25000 : 24000$

$25 : 24$

A got  $1/50 \times 60000 = \text{Rs } 1200$  extra

So remaining profit to be shared between A and B is  $60,000 - 1200 = \text{Rs } 58,800$

So now B got  $= 24/(25+24) \times 58,800 = \text{Rs } 28,800$

So A got  $= 1200 + (58800 - 28800) = \text{Rs } 31200$

So different in shares  $= 31200 - 28800 = \text{Rs } 2400$

□ In a business A and B invested Rs 5,000 and Rs 6,000 respectively. After 9 months from start of business, C invested Rs 12000 and A and B both withdrew Rs 1,000 each from their investments. If at the end of year B and C together got Rs 12,250 from the total profit, then what is the total profit?

A) Rs 18,900

B) Rs 13,600

C) Rs 15,100

D) Rs 15,300

E) Rs 16,300

**View Answer****Option A****Solution:**

Ratio of shares A : B : C is

$5000 \times 9 + 4000 \times 3 : 6000 \times 9 + 5000 \times 3 : 12000 \times 3$

$19 : 23 : 12$

Let x is the total profit

So  $[(23+12)/54] \times x = 12,250$

Solve,  $x = \text{Rs } 18,900$

□ In a business, A and B invested Rs 10,000 and Rs 11,000 respectively. After 4 months they both withdrew Rs 1000 from their respective investments. After a further of 6 months, A invested Rs 1000 more and B invested Rs 2000 more. What is the difference in the shares of both if Rs 54,450 is received as total profit after a year?

A) Rs 2480

B) Rs 3490

C) Rs 2310

- D) Rs 3150  
E) Rs 3220

**View Answer****Option D****Solution:**

Ratio of shares of profit of A : B is

$$10000*4 + 9000*6 + 10000*2 : 11000*4 + 10000*6 + 12000*2$$

$$10000*6 + 9000*6 : 11000*4 + 10000*6 + 12000*2$$

$$10*6 + 9*6 : 11*4 + 10*6 + 12*2$$

$$10*3 + 9*3 : 11*2 + 10*3 + 12$$

$$57 : 64$$

$$\text{Difference} = (64-57)/(57+64) * 54450 = \text{Rs } 3150$$

- In a business, A and B invested Rs 2600 and Rs 3900 respectively. After half year, A withdrew half and B withdrew 1/3rd from their investments. What is the difference in the shares of both, if a total profit of Rs 16,800 is received after a year?

- A) Rs 4200  
B) Rs 5700  
C) Rs 4500  
D) Rs 5830  
E) Rs 4770

**View Answer****Option A****Solution:**

B withdrew =  $\frac{1}{3} * 3900 = 1300$ , so for last 6 months invested  $3900-1300 = 2600$

Ratio of shares of profit of A : B is

$$2600*6 + 1300*6 : 3900*6 + 2600*6$$

$$26 + 13 : 39 + 26$$

$$2 + 1 : 3 + 2 = 3 : 5$$

$$\text{So difference} = (5-3)/(3+5) * 16800 = \text{Rs } 4200$$

- Arun and Vibha started a business by investing Rs 20,000 and Rs 16,000 respectively. After 4 months, Tisha joined them by investing Rs 24,000. Also Arun and Vibha both added Rs 3000. Find the difference in profits of Arun and Tisha if after a year they get Rs 26,880 as profit.

- A) Rs 2430  
B) Rs 2880  
C) Rs 2920  
D) Rs 2220

- E) Rs 1850

**View Answer****Option B****Solution:**

Ratio of shares of profit of

Arun : Vibha : Tisha

$$20000*4 + 23000*8 : 16000*4 + 19000*8 : 24000*8$$

$$\Rightarrow 20 + 23*2 : 16 + 19*2 : 24*2$$

$$\Rightarrow 11 : 9 : 8$$

So difference in profits of Arun and Tisha =

$$\left[ \frac{11-8}{11+9+8} \right] * 26,880 = \text{Rs } 1880$$

- Priya started a business by investing Rs 2050. After 7 months she is joined by Varun and Rekha. If after 7 months Priya withdraws Rs 300, Varun invests Rs 2310 and Rekha invests Rs 2730, then find the share of profit of Varun and Rekha together out of total profit of Rs 11500 after a year.

- A) Rs 6500  
B) Rs 6320  
C) Rs 6560  
D) Rs 6500  
E) Rs 6000

**View Answer****Option E****Solution:**

Ratio of shares of profit of

Priya : Varun : Rekha

$$2050*7 + 1750*5 : 2310*5 : 2730*5$$

$$\Rightarrow 2050 + 250*5 : 330*5 : 390*5$$

$$\Rightarrow 41+25 : 33 : 39$$

$$\Rightarrow 22 : 11 : 13$$

So total profits of Varun and Rekha =

$$\left[ \frac{11+13}{22+11+13} \right] * 11,500 = \text{Rs } 6000$$

- Kavita invested Rs 2400 for x months in a business and Vipin invested Rs 2800 for 3 months more than Kavita in the same business. If Kavita got Rs 18000 as her share out of a total profit of Rs 48,000, find for how many months Vipin invested?

- A) 6 months  
B) 15 months



- C) 10 months  
D) 12 months  
E) 9 months

**View Answer**

**Option C**

**Solution:**

Ratio of shares of profit of

Kavita: Vipin

$$2400 \times x : 2800 \times (x+3)$$

$$\Rightarrow 6x : 7x+21$$

Given:

$$\left[ \frac{6x}{13x+21} \right] \times 48,000 = 18,000$$

Solve,  $x = 7$

So Vipin invested for  $7+3 = 10$  months

□ Suman and Chavi started a business by investing Rs 1960 and Rs 2450 respectively. Chavi got Rs 200 per month for her work. After 5 months, Suman added Rs 340 more and Chavi left. If after a year they get a total profit of Rs 18,850, then what total amount did Chavi get?

- A) Rs 7,150  
B) Rs 6,980  
C) Rs 6,320  
D) Rs 4,250  
E) Rs 6,250

**View Answer**

**Option E**

**Solution:**

Ratio of shares of profit of

Suman : Chavi

$$1960 \times 5 + 2300 \times 7 : 2450 \times 5$$

$$\Rightarrow 280 \times 5 + 2300 : 350 \times 5$$

$$\Rightarrow 74 : 35$$

Chavi got  $200 \times 5 = \text{Rs } 1000$  for her work, so now the profit which will be divided according to ratio will be  $18850 - 1000 = \text{Rs } 17,850$

$$\text{So Chavi's share} = \left[ \frac{35}{74+35} \right] \times 17,850 = 5,250$$

$$\text{So total amount of Chavi} = 1000 + 5250 = \text{Rs } 6,250$$

□ Reema invested Rs 24000 for  $x$  months, Sheena invested Rs 20000 for 3 months more than Reema and Tina invested Rs 16000 for 3 months more than Sheena. If difference between the shares of Tina and Reema is Rs 4200 out of a

total profit of Rs 34,200, find  $x$ .

- A) 5  
B) 2  
C) 9  
D) 7  
E) 6

**View Answer**

**Option A**

**Solution:**

Ratio of shares of profit of

Reema : Sheena : Tina

$$24000 \times x : 20000 \times (x+3) : 16000 \times (x+6)$$

$$\Rightarrow 6x : 5x+15 : 4x+24$$

Given:

$$\left[ \frac{4x+24 - 6x}{6x + 5x+15 + 4x+24} \right] \times 34,200 = \text{Rs } 4200$$

Solve,  $x = 5$

□ Shreya started a business by investing Rs 2200. After 4 months she adds Rs 200 and Aditya joins her with Rs 3000. After further 6 months, both withdrew Rs 400. Find the difference in their shares of profit if total profit after a year is Rs 15,750.

- A) Rs 2000  
B) Rs 1750  
C) Rs 1250  
D) Rs 2350  
E) Rs 1320

**View Answer**

**Option C**

**Solution:**

Ratio of shares of profit of

Shreya : Aditya

$$2200 \times 4 + 2400 \times 6 + 2000 \times 2 : 3000 \times 6 + 2600 \times 2$$

$$\Rightarrow 22 + 6 \times 6 + 5 \times 2 : 15 \times 3 + 13$$

$$\Rightarrow 34 : 29$$

So difference in their profits =

$$\left[ \frac{34 - 29}{34 + 29} \right] \times 15,750 = \text{Rs } 1250$$

□ Three friends invested Rs 700, Rs 600 and Rs 630 respectively. The first one invested for  $x$  months, second for  $(x+3)$  months and third for  $(x+6)$  months. What is the longest duration of investment, if ratio of share of first to third is 4 : 9?



- A) 20 months  
B) 10 months  
C) 14 months  
D) 4 months  
E) None of these

**View Answer****Option B****Solution:**

Ratio of shares of profit of

First : Second : Third

$$700*x : 600*(x+3) : 630*(x+6)$$

Given:

$$\frac{70x}{63x(x+6)} =$$

$$\frac{4}{9}$$

Solve,  $x = 4$ So longest duration =  $4+6 = 10$  months

- Bhavna, Charu and Shikha invested Rs 3600 for 7 months, Rs 4300 for 9 months and Rs 4500 for 6 months respectively. What is the share of profit of Charu out of a total profit of Rs 12,120?
- A) Rs 4260  
B) Rs 3760  
C) Rs 5160  
D) Rs 5380  
E) Rs 6320

**View Answer****Option C****Solution:**

Ratio of shares of profit of

Bhavna : Charu : Shikha

$$3600*7 : 4300*9 : 4500*6$$

$$\Rightarrow 4*7 : 43 : 15*2$$

$$\Rightarrow 28 : 43 : 30$$

$$\text{So share of Charu} = \frac{43}{28+43+30} * 12,120 = \text{Rs } 5160$$

- Purna invested Rs  $x$  for 6 months, Ankita Rs 2400 for 10 months and Pavneet Rs 3900 for 8 months. If Ankita got Rs 6000 out of a total profit of Rs 19,200, then what is the money

invested by Purna?

- A) Rs 2400  
B) Rs 4400  
C) Rs 2300  
D) Rs 3800  
E) Rs 3600

**View Answer****Option E****Solution:**

Ratio of shares of profit of

Purna : Ankita : Pavneet

$$x*6 : 2400*10 : 3900*8$$

$$\Rightarrow 3x : 1200*10 : 3900*4$$

Given:

$$\frac{12000}{3(x+9200)} * 19200 = 6000$$

$$19200 = 6000$$

Solve,  $x = \text{Rs } 3600$ 

- Trisha and Misha invested Rs 3500 and Rs 3000 in a business. After 7 months both added Rs 500 to their investments. If after a year the difference in their shares of profit is Rs 1140, find the total profit at the end of year.

- A) Rs 16730  
B) Rs 15770  
C) Rs 12560  
D) Rs 15830  
E) Rs 14770

**View Answer****Option B****Solution:**

Ratio of shares of profit of

Trisha : Misha

$$3500*7 + 4000*5 : 3000*7 + 3500*5$$

$$\Rightarrow 7*7 + 40 : 6*7 + 35$$

$$\Rightarrow 89 : 77$$

Given:

$$\frac{89-77}{89+77} * x =$$

$$1140$$

Solve,  $x = \text{Rs } 15770$