1. A and B started a business investing Rs. 90,000 and Rs 20,000 respectively. In what ratio the profit earned after 2 years be divided between A and B respectively?

a. 9:2

b. 3:2

c. 18:20

d. 18:4

2. Praveen starts business with Rs.3500 and after 5 months, Hari joins with Praveen as his partner. After a year, the profit is divided in the ratio 2 : 3. What is Hari's contribution in the capital?

a.Rs.7500

b.Rs.8000

c.Rs.8500

d.Rs.9000

3. Ajay, Bhavan and Chetan started a business together. Thrice the investment of Ajay, twice the investment of Bhavan and the investment of Chetan are equal. Find the ratio of their respective profits at the end of the year?

a. 1:2:1

b. 2:3:6

c. 3:2:1

d. 1:2:3

4. A, B and C started a business with capitals of Rs.6000, Rs.8000, and Rs.10000 respectively. At the end of the year, the profit share of B is Rs1000. The difference between the profit shares of A and C is

a. Rs. 400

b. Rs. 450

c. Rs. 500

d. Rs. 550

5. The ratio of investments of A, B and C is 5:6:7. If they share the profit in the ratio of 5:9:14, then find the ratio of their periods of investments.
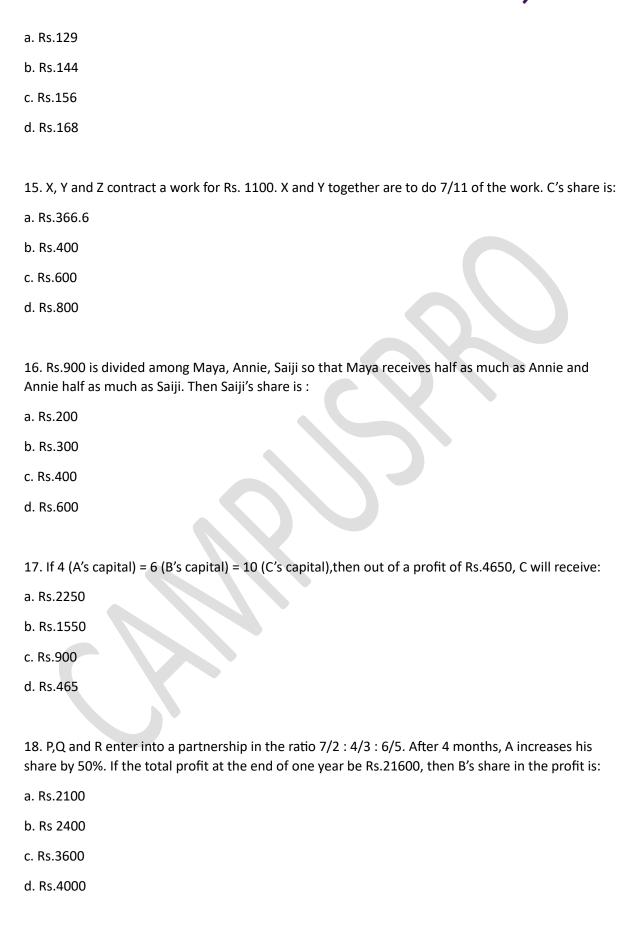
a. 2:3:4

b. 3:5:6

c. 3:2:4

d. 2:4:3

6. A, B, C subscribe Rs. 50000 for a business. A subscribes Rs. 4000 more than B and B Rs. 5000 more than C. Out of a total profit of Rs.35000 A receives:

a. Rs. 11900

b. Rs. 8400

c. Rs. 14700

d. Rs. 13600

7. Four milkmen rented a pasture. A grazed 24 cows for 3 months, B 10 cows for 5 months, C 35 cows for 4 months and D 21 cows for 3 months. If A's share of rent is Rs.720, find the total rent of the field.

a. Rs.3250

b. Rs.3350

c. Rs.3450

d. Rs.3550

8. A, B, C hired a car for Rs. 720 and used it for 9, 10 and 13 hours respectively. Hire charges paid by B are:

a. Rs 220

b. Rs.225

c. Rs.230

d. Rs.235

9. Arjun started a business with Rs. 20,000 and is joined afterwards by Anoop with Rs.30, 000. After how many months did Anoop join if the profits at the end of the year are divided equally?

 a. 3

 b. 4

 c. 5

 d. 6

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.60, 000, the amount invested by Q is:

a. Rs. 65,000

b. Rs. 70,000

c. Rs. 80,000

d. Rs. 90,000

11. Anand and Deepak started a business investing Rs. 22,500 and Rs. 35,000 respectively. Out of a total profit of Rs. 13,800, Deepak's share is :

a. Rs. 5400

b. Rs.7200

c. Rs. 8400

d. Rs. 9600

12. P and Q entered into a partnership investing Rs. 16,000 and Rs. 12,000 respectively. After 3 months, A withdrew Rs.5000 while B invested Rs. 5000 more. After 3 more months, C joins the business with a capital of Rs. 21,000. The share of B exceeds that of C, out of a total profit of Rs. 26,400 after one year by:

a. Rs.2400

b. Rs.3000

c. Rs.3600

d. Rs.4800

13. Kiran received Rs. 6000 as his share out of the total profit of Rs.9000 which he and Arun earned at the end of one year. If Kiran invested Rs. 30,000 for 6 months, whereas Arun invested his amount for the whole year, what was the amount invested by Arun?

a. Rs.5000

b. Rs.6000

c. Rs.7000

d. Rs.7500

14. A, B and C enter into a partnership and theirs shares are in the ratio 1/2 : 1/3 : 1/4. After two months, A withdraws half of his capital and after 10 months, a profit of Rs.378 is divided among them. What is B's share?

a. Rs.129

b. Rs.144

c. Rs.156

d. Rs.168

15. X, Y and Z contract a work for Rs. 1100. X and Y together are to do 7/11 of the work. C's share is:

a. Rs.366.6

b. Rs.400

c. Rs.600

d. Rs.800

16. Rs.900 is divided among Maya, Annie, Saiji so that Maya receives half as much as Annie and Annie half as much as Saiji. Then Saiji's share is :

a. Rs.200

b. Rs.300

c. Rs.400

d. Rs.600

17. If 4 (A's capital) = 6 (B's capital) = 10 (C's capital),then out of a profit of Rs.4650, C will receive:

a. Rs.2250

b. Rs.1550

c. Rs.900

d. Rs.465

18. P,Q and R enter into a partnership in the ratio 7/2 : 4/3 : 6/5. After 4 months, A increases his share by 50%. If the total profit at the end of one year be Rs.21600, then B's share in the profit is:

a. Rs.2100

b. Rs 2400

c. Rs.3600

d. Rs.4000

19. Three partner's A,B,C start a business. Twice A's capital is equal to thrice B's capital and B's capital is four times C's capital. Out of a total profit of Rs.16500 at the end of the year, B's share is:

a. Rs.4000

b. Rs.6000

c. Rs 7500

d. Rs.6600

20. In a partnership, A invests 1/6 of the capital for 1/6 of the time, B invests 1/3 of the capital for 1/3 of the time and C, the rest of the capital for the whole time. Out of a profit of Rs.4600, B's share is:

a. Rs.650

b. Rs.800

c. Rs.960

d. Rs.1000

Answer & Explanations

1. Exp: A: B = 90000 : 20000 = 90 : 20 = 18 : 4 = 9 : 2

2. Exp: Let Hari's capital be Rs. x. Then, $\frac{3500 * 12}{7x}$ = 2/3 => 14x = 126000 => x = 9000.

3. Exp: Let the investments of Ajay, Bhavan and Chetan be Rs,a, Rs.b and Rs.c respectively.

   3b = 2b = c.

   a = c/3.

   b = c/2.

   Ratio of profits of Ajay, Bhavan and Chetan at the end of one year = Ratio of their respective investments
   = 2:3:6.

4. Exp: Ratio of investments of A,B and C is 6000 : 8000 : 10000 = 3 : 4 : 5.

   And also given that, Profit share of 'B' is Rs.1000.

   Now required difference is 5 – 3 = 2 parts.

   Therefore, Required difference = 2/4 (1000) = Rs.500.

5. Exp: The ratio of investments of A, B and C is 5:6:7.

   The ratio of shares of A, B and C is 5:9:14.

   Therefore, Ratio of their periods of investments is

   (5/5) : (9/6) : (14/7) = 1:3/2:2 = 2:3:4.

6. Exp: Let C = x. Then B = x + 5000 and A + x + 5000 + 4000 = x + 9000

   Therefore, x + x + 5000 + x + 9000 = 50000 Û x = 12000.

   Therefore, A : B : C = 21000 : 17000 : 12000 = 21 : 17 : 12

   Therefore, A's share = Rs (35000 * 21/50) = Rs. 14700

7. Exp: Ratio of shares of A, B, C, D = (24 * 3) : (10 * 5) : (35 * 4) : (21 * 3)

   = 72 : 50 : 140 : 63

Partnership

Let total rent be Rs.x. Then, A's share = Rs. $\frac{72x}{325}$

Therefore, $\frac{72x}{325} = 720 \Rightarrow x = \frac{720 * 325}{72} = 3250.$

Hence, total rent of the field is Rs.3250.

8. Exp: A : B : C = 9 : 10 : 13.

Hire charges paid by B = Rs. $720 * \frac{10}{32}$

= Rs. 225.

9. Exp: Suppose Anoop joined after 3 months.

Then, $20000 * 12 = 30000 * (12 - x) \Rightarrow 120000 = 30000x \Rightarrow x = 4.$

10. Exp: Suppose Q invested Rs.y. Then, $y = \frac{60,000}{y} = 2/3$ or $y = \frac{60000 * 3}{2}$

= 90,000.

11. Exp: Ratio of their shares = 22500 : 35000 = 9 : 14.

Deepak's share = Rs. 13800 * 14/23

= Rs. 8400

12. Exp: A : B : C = (16000 x 3 + 11000 * 9) : (12000 * 3 + 17000 * 9) : (21000 * 6)

= 147 : 189 : 126 = 7 : 9 : 6.

Therefore, Difference of B and C's shares = Rs. 26400 x 9/22 – 26400 x 6/22

= Rs.3600

13. Exp: Suppose Arun invested Rs.x. Then, Kiran : Arun = (30000 * 6) : (x * 12)

Therefore, $\frac{180000}{12x} = \frac{6000}{3000}$ or $x = \frac{18000}{24} = 7500.$

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

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

A : B : C = (6x * 2 + 3x * 10) : (4x * 12) : (3x * 12) = 42 : 48 : 36 = 7 : 8 : 6.

Therefore, B's share = Rs. 378 * 8/21

    = Rs.144.

15. Exp: (A + B) : C = 7/11 : 4/11 = 7 : 4.

Therefore, C's share = Rs. 1100 * 4/11

  = Rs.400.

16. Exp: Let Saiji = x. Then, Annie = x/2 and Maya = x/4.

Therefore, Maya : Annie : Saiji = x/4 : x/2 : x = 1 : 2 : 4.

Therefore, Saiji's share = Rs. 900 * 4/9

        = Rs.400.

17. Exp: 4A = 6B = 10C = k => A = k/4, B = k/6 and C = k/10.

Therefore, A : B : C = k/4 : k/6 : k/10 = 15 : 10 : 6

Therefore, C's share = Rs.   4650* 6/31

  = Rs.900.

18. Exp: Ratio of initial investments = 105 : 40 : 36.

Let the initial investments be 105x, 40x & 36x.

Therefore, P : Q : R = 105x * 4 + 150/100 x 105x * 8 : 40x * 12 : 36x * 12

 = 1680x : 480x : 432x = 35 : 10 : 9.

Therefore, Q's share = Rs.   21600 * 10/54

  = Rs.4000.

19. Exp: Let C = x. Then B = 4x and 2A = 3 * 4x = 12x. or A = 6x.

Therefore, A : B : C = 6x : 4x : x = 6 : 4 : 1.

Therefore, B's capital = Rs. 16500 * 4/11

       = Rs.6000.

20. Exp: Suppose A invests x/6 for y/6 months.

B invests x/3 for y/3 months.

C invests   x –   x/6 + x/3   i.e x/2 for y months.

Therefore, A : B : C = *x*/6 * *y*/6 : *x*/3 * *y*/3 : *x*/2 * *y* = 1/36 : 1/9 : 1/2 = 1 : 4 : 18.

Therefore, B's share = Rs. 4600 * 4/23

 = Rs.800.