1. If ratio of three numbers is 3:4:7 and their sum is 70, find the difference of the largest and the smallest number.

2. If A:B is 4:5, what is the value of (3A+2B):(5A-3B)?

3. If A:B = 4:5 and 3A+2B = 1100, find the value of 3B+2A.

4. If ratio of A:B:C:D is 4:8:3:9, and B+C = 143, what the value of 2A+D?

5. If ₹5005 are divided among A, B, C such that A gets 2/9 of what B and C together get and B gets 3/10 of what A and C together get, find how much does C get (in ₹)?

6. If A:B=6:5 and B:C= 4:3 and A+B+C = 590, what is the value of A+B-C?

7. The sum of four numbers is 253. The ratio of the first number to the second one is 2:3. The ratio of the second number to the third one is 5:6. The ratio of the third number to the fourth one is 8:9. What is the average of the second and the third number?

8. The ratio of the present ages of a husband and a wife is 5:4. Which of the following can be a possible ratio of their ages 20 years ago?
(A) 5:4 (B) 6:5 (C) 23:20 (D) 13:10

9. A student scored marks in the ratio 5:4:6:8:7 in five subjects having equal maximum marks. He scored 50% marks in all the five subjects taken together. In how many subjects did he score more than 55% of the maximum marks?

10. A man gave 3/5 of his property to his wife and 4/9 of the remainder to his son. He then distributed the remaining property among his three daughters in the ratio 11 : 10 : 9. The difference of his sons' share and the share of the daughter with the maximum benefit is Rs. 15600. How much was given to the wife?

11. A bag contains ₹600 in the form of one rupee, 50 ps and 25 ps coins in the ratio of 3: 4:12. Find the total value (in ₹) of the 25 ps coins present in the bag.

12. A and B earn in the ratio 2:1. They spend in the ratio 5:3 and save in the ratio 4:1. If the total monthly savings of both A and B is ₹5000, find their monthly incomes.

13. A person has a certain number of chocolates. He gave ¼ of the total to Ramesh, 1/3 of the remaining to Suresh, 1/2 of the remaining to Taresh, 2/3 of the remaining to Yogesh and then 80% of the remaining to Viresh, now he has 1 chocolate remaining. How much has he given to Taresh?

14. The ratio of present ages of Suresh and Mahesh is 7:5. If after six years their ages will be in the ratio of 4:3, the present age of Mahesh is -

15. The ratio of present ages of Manasi and Disha is 6:7. Manasi is 7 years older than Kshipra who was 25 four years ago. Find the sum of ages of Manasi and Disha.

16. The sum of present ages of A and B is 60 years. Five years ago A's age was 4 times that of B. What will be B's age after 10 years?

17. Present ages of A, B and C (A being the oldest and C being the youngest) are all perfect squares.

Their average age after 3 years will be 13. Find the present age of B.

18. In 2015, ages of husband and wife were 28 and 24 years respectively. They were blessed with baby twins in 2015. In which year, the average age of family of 4 will be same as that of only husband and wife just before the babies were born?

19. A, B and C invested capitals in the ratio 2:3:5; the timing of their investments being in the ratio 4:5:6. In what ratio would their profit be distributed?

20. Mohan, Krishna and Anand together invested ₹450,000 in a business. At the end of the year they shared profits in the ratio 7: 9: 16. If their time duration of investment in the business was in the ratio 7: 6: 8. Find amount invested by Krishna in the business?

21. A, B and C enter in to partnership. A invests ₹12000 for 4 months, B ₹14000 for 8 months, and C ₹10000 for 10 months. They gain ₹5850 altogether. Find the B's share.

22. Manoj got ₹6000 as his share out of the total profit of ₹9000 which he and Ramesh earned at the end of one year. If Manoj invested ₹20000 for 6 months, whereas Ramesh invested his amount for the whole year, the amount invested by Ramesh was:

23. A, B and C invested some amount in a business in the ratio of 5:7:6 respectively. In the next year, their investments are increased by 26%, 20% and 15% respectively. In what ratio the profit earned during the second year should be distributed among them?

24. A and B enter in to a partnership with their capitals in the ratio 7: 9. At the end of 8 months, A withdraws his capital. If they receive the profits in the ratio 8:9, find how long B's capital was used?

25. Ajay started a business by investing ₹40000. Later he was joined by Vijay with ₹30000. At the end of the first year, Vijay received 1/3rd of the total profit. After how many months did Vijay join?

26. Find fourth proportional of 3.6, 6, and 2.7.

27. If the cost of a diamond varies directly with the square of its weight and if the weight of the diamond is 5 grams, then the cost is ₹1500. What will be the cost of 12 grams diamond?

28. The electricity bill of a certain establishment is partly fixed and partly varies as the number of units of electricity consumed. When in a certain month 480 units are consumed, the bill is ₹1600. In another month when 550 units are consumed, the bill is ₹1810. In another month when 600 units are consumed, the bill for that month would be:

29. The cost per kg of rice varies inversely with the square of the quantity of rice produced in a year. When 7 million tons of rice was produced, its cost was ₹36/kg. How much was the production in the year when the cost of rice was ₹49/kg?

30. An engine by itself can go at a speed of 24 kmph. Its speed reduces by a quantity which varies as the square root of the number of wagons attached. With 4 wagons, the speed is 20 kmph. Find the maximum number of wagons that can be attached so that the engine will just move.

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