

RATIO & PROPORTION

Finding Ratio:

1. If $a:b = 2:3$ and $b:c = 4:5$, then $a:b:c = ?$
2. If $a:b = 2:3$ and $b:c = 4:5$ and $c:d = 6:7$ then $a:b:c:d = ?$
3. If $a:b = 1\frac{1}{2} : 2\frac{1}{4}$ and $b:c = 2:3\frac{1}{2}$, then what is $a:b:c$ equal to
4. If $0.75 : x :: 5 : 8$, then x is equal to :

Divided into parts:

5. The sum of three numbers is 140. If the ratio of the first to the second is $2:3$ and that of second to the third is $4:5$ then the second number is?
6. Find B's share in Rs.6300 if $A:B = 2:3$, $B:C = 4:5$ and $C:D = 3:7$
7. The cost of making an article is divided between materials, labor and overheads in the ratio of $3:4:1$. If the material cost Rs. 234, then the labor cost?

Based on Numbers:

8. The ratio of two numbers is $6:7$, the sum is 650. Find the First number?
9. 20% and 50% are 2 numbers respectively more than a 3rd number. Find the ratios of 2 numbers?
10. In a school the number of boys and that of the girls are in the respective ratio of $2:3$. If the number of boys is increased by 20% and that of girls is increased by 10%, what will be the new ratio of number of boys to that of the girls?
11. A sum of money is to be distributed among P, Q, R and S in the proportion $2:5:6:7$, If R get Rs.500 more than S. What is P's share?
12. Rs 650 was divided among 3 children in the ratio $2 : 4 : 7$. Had it been divided in the ratio $\frac{1}{2} : \frac{1}{4} : \frac{1}{7}$. Who would have gained the most and by how much?

Increase / Decrease:

13. The ratio between two numbers is $2:3$. If each number is increased by 4, the ratio between them becomes $5:7$, the difference between numbers.
14. What number has to be added to each term of $4 : 7$ to make the ratio $5 : 6$?

15. A, B and C divide Rs 4200 among themselves in the ratio 7 : 8 : 6. If Rs 200 is added to each of their shares, what is the new ratio in which they will receive the money?
16. Salaries of Ravi and Sumit are in the ratio 2 : 3. If the salary of each is increased by Rs. 4000, the new ratio becomes 40 : 57. What is Sumit's salary?

Income / Expenditure

17. The income of Riya and Priya are in the ratio of 4:5 and their expenditure is in the ratio of 2:3. If each of them saves 2000, then find their income.?
18. If the ratio of income in two consecutive years is 2:3 respectively. The ratio of their expenditure is 5:9. Income of 2nd year is 45000 and expenditure for the 1st year is 25000. Find the savings in both the year?

Coins:

19. A box contains 280 coins of one rupee, 50-paise and 25paise. The value of each kind of the coins are in the ratio of 8 : 4 : 3. Then the number of 50 paise coins is
20. David has Rs.30 rupees in the denomination of 25 paisa, 10 paisa, and 5 paisa in ratio 1:2:3. Calculate how many 25 paisa coins he has ?

Partnership:

21. A starts business with Rs. 3500 and after 5 months, B joins with A as his partner. After a year, the profit is divided in the ratio 2 : 3. What is B's contribution in the capital?
22. A and B started a partnership business investing some amount in the ratio of 3 : 5. C joined them after six months with an amount equal to that of B. In what proportion should the profit at the end of one year be distributed among A, B and C ?
23. A, B, C rent a pasture. A puts 10 oxen for 7 months, B puts 12 oxen for 5 months and C puts 15 oxen for 3 months for grazing. If the rent of the pasture is Rs. 175, how much must C pay as his share of rent?
24. A and B invest in a business in the ratio 3 : 2. If 5% of the total profit goes to charity and A's share is Rs. 855, the total profit is: