**Practice Sheet**

1. The ratio of A:B:C is 5:2:3 : - Find A,B,C: if,

(I)B is 18

(II)Sum of B&C is 55

(III) Product of B&C is 36

(IV)Sum of A&B is 36 more than C

2. Two numbers are in the ratio of 4:5 and the sum of these numbers is 27. Find the two numbers.

3. Two numbers are in the ratio of 4:5. If the difference between these numbers is 12, then find the numbers.

4. Given two numbers which are in the ratio of 3:4. If 8 is added to each of them, their ratio is changed to 5:6. Find the two numbers.

5. A sum of money is to be distributed among A, B, C, D in the proportion of 5 : 2 : 4 : 3. If C gets Rs. 1000 more than D, what is the total amount?  
a. Rs. 14000  b. Rs. 15000  c. Rs. 20000

6. If Rs. 782 be divided into three parts, proportional to 1/2 :2/3:3/4, then the first part is:  
a. Rs. 182  b. Rs. 190  c. Rs. 196  d. Rs. 204

7. The salaries of A, B, and C are in the ratio of 1 : 2 : 3. The salary of B and C together is Rs. 5000. Find the difference between the salary of A and C?

A) 1000 B) 2000 C) 3000 D) 6000

8. A bag contains 50 paisa, 20 paisa and 10 paisa coins in the ratio 5:3:1.If the total amount in the bag is 640 Rs,find the difference in the amounts contributed by 50 paisa and 20 paisa coins.  
a. Rs.300  b. Rs.400  c. Rs.380  d. None of these

9. IN a bag there are coins of 25p, 10 p and 5 p in the ratio of 1:2:3. If there is Rs. 30 in all how many 5 p coins are there?

a.50 b. 100 c.150 d.200

10. If x:y is 2:3, find the value of (3x + 2y) : (2x+5y)

a.12/25 b.11/27 c.12/19 d.11/23

11. Annual income of A and B is in the ratio of 5:4 and their annual expenses bear a ratio of 4:3. If each of them saves Rs.500 at the end of the year, then find their annual income.

12. The incomes of Mohan and Sohan are in the ratio 7:2 and their expenditures are in the ratio 6:1. If each saves Rs.1000, find their expenditures

Q13 : If a,b,c and d are in continued proportion, then how can d be expressed in terms of a and c?

a. (c^3/2)(a^1/2) b. (axc)^1/2 c. (c^3/2)(a^-1/2) d. None

Q 14 : Which among the following cannot be the ratio of the boys to girls in a School having 72 students?

a. 3:5 b. 5:4 c. 9:7 d. 1:2

Q 15 : The price of a TV and a Microwave Oven is 12,000 and Rs.8000 respectively. In the next one year, if the price of the TV increased by 20%, while that of the Microwave Oven decreased by 10%, find the new ratio of their prices?

a. 1.5:1 b. 1:2 c. 3:1 d. 2:1

Q 16: If a:b=2:3, b:c=4:5 and c:d=3:2, find the value of d:a?

a. 4:5 b. 5:4 c. 2:5 d. 5:3

Q 17 : The ratio of the number of employees who are graduates and above to those who are not is 7:11 in an organization. If the non graduates are 48 more than those who are graduates, find the number of graduates in the organization?

a. 12 b. 216 c. 132 d. 84

Q 18 : The number of 25 paisa, 50 paisa and 1 rupee coins in a bag is in the ratio 5:6:2. If the value of the coins is Rs.2500, find the value of all the 25 paisa coins in the bag?

a. 500 b. 2000 c. 625 d. None of These

Q19 : A Cat pursues a Hare and takes 3 leaps for every 5 leaps of the Hare. Also, 4 leaps of Cat is equal to 3 leaps of the Hare. Compare the speeds of the Cat to the Hare?

a. 20:9 b. 12:15 c. 9:20 d. 15:11

Q20 : Rs.750 is divided between A, B and C such that if Rs. 20,30 and 50 are substracted from their shares, the remaining amount with each one in that order is in the ratio 1/2 : 1/3 : 1/4. Find the difference between the original shares of A and C?

a. Rs.140 b. Rs.120 c. Rs. 180 d. Rs.200

Q21 : The present ages of a Father and Son is 13:11. 9 years ago the ratio of their ages was 5:4. Find the difference in the Father’s present age and the Son’s age 5 years later?

a. 1 year b. 2 years c. 3 years d. 4 years.

Q22 : A can beat B by 20 m in a 100 m race and can beat C by 25 m in a 125 m race. Then in a 500 m race between B and C who will beat whom and by how many metres?

a. B will beat C by 100 m b. C will beat B by 100 m

c. C will beat B by 20 m d. The Race will end in a dead heat

Q23 : 5 years ago, the ratio of the ages of a Mother and Daughter was 7:3. After 6 years, the ratio will be 16:10. Find the present ratio of their ages?

a. 3:2 b. 13:7 c. 4:3 d. 5:2

Q24 : 3 people A,B and C invest Rs. 5000, 6000 and 7000 respectively to start a Business. If 10% of the total profit is given to the working partner A and the remaining amount gets divided in the ratio of the investments, what will be the ratio of the share of profits received by A and C?

a. 5:7 b. 1:1 c. 7:5 d. 7:6

Q25 : The height of a person varies directly as the square root of his age. If a person is 4 ft. tall at 25 years, find the height of the person at 36 years?

a. 6 ft b. 4.5 ft c. 4.7 ft d. 4.8 ft

Q26: A certain amount was divided between A,B and C such that twice the amount with A is same as three times the amount with B and twice the amount with B is same as five times the amount with C. Find the ratio of the amounts between A and C?

a. 4:15 b. 2:7 c. 15:4 d. 7:4

Q27 : A started a Business with a Capital of Rs.6000. B joined few months later with a capital of Rs. 9000. If the profit at the end of the year was divided equally between A and B, then after how many months did B join?

a. 8 b. 4 c. 6 d. 3

Q28 : A variable P is directly proportional to Q and inversely proportional to the square root of R. If the value of P is 5 when R is 16 and Q is 10. Find the value of P when R is 8 and Q is 20.

a. 20/√2 b. 20x√2 c. 40 d. 10

Q29 : A can give B 15 points in a 60 point game while B can give C 20 points in a 100 point game. How many points can A give to C in a 200 point game?

a. 35 b. 45 c. 60 d. 80

30. A,B,C started a business with capitals Rs 60,000, Rs 50,000 and Rs 40,000 respectively. After 9 months C left them. If profit after one year us Rs 14,000 then profit of C is

A.Rs.5000 B. Rs. 4000 C.Rs.6000 D.Rs.3000

31. 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?

A.Rs. 45 B.Rs.50 C.Rs.55 D.Rs.60

32. A invests Rs 4000 for 6 months, B invests Rs 6000 for 8 months and C invests Rs. 9000 for months in a business. If profit is Rs. 1800 then what is the share of B?

A.Rs.600 B. Rs. 900 C.Rs.800 D.Rs.1000

33. Jayant opened a shop investing Rs. 30,000. Madhu joined him 2 months later, investing Rs.45,000. They earned a profit of Rs.54,000 after completion of one year. What will be Madhu’s share of profit?

A.Rs.27,000 B. Rs. 24,000 C.Rs.30,000 D.Rs.36,000

34. In a business Ram invests Rs.60,000. After 6 months his uncle invests Rs.40,000. After one year they got a profit of Rs.12,000. Then uncle gets his share as

A.Rs.2500 B. Rs. 2000 C.Rs.1000 D.Rs.3000

35. 12 men and 18 boys, working 7.5 hours a day, can do a piece of work in 60 days. If a man works equals to 2 boys, then how many boys will be required to help 21 men to do twice the work in 50 days, working 9 hours a day ?

(a) 30 (b) 42 (c) 48 (d) 90

36. 24 men working 8 hours a day can finish a work in 10 days. Working at the rate of 10 hours a day, the number of men required to finish the same work in 6 days is :

(a) 30 (b) 32 (c) 34 (d) 36

37. 12 men complete a work in 18 days. Six days after they had started working, 4 men joined them. How many days will all

of them take to complete the remaining work ?

(a) 10 days (b) 12 days (c) 15 days (d) 9 days

38. A tyre has two punctures. The first puncture along would have made the tyre flat in 9 minutes and the second alone would have done it in 6 minutes. If air leaks out at a constant rate, how long does it take both the punctures together to make it flat ?

(a) 1.5minutes (b) 3 12 minutes (c) 3 3 5 minutes (d) 4 14 minutes

39. A man, a woman or a boy can do a job in 20 days, 30 days or 60 days respectively. How many boys must assist 2 men and 8 women to do the work in 2 days ?

(a) 15 boys (b) 8 boys (c) 10 boys (d) None of these

40. If 15 women or 10 men can complete a project in 55 days, in how many days will 5 women and 4 men working together complete the same project ?

(a) 75 (b) 8 (c) 9 (d) 85

41. A machine P can print one lakh books in 8 hours, machine Q can print the same number of books in 10 hours while machine R can print them in 12 hours. All the machines are started at 9 a.m. while machine P is closed at 11 a.m. and the remaining two machines complete the work. Approximately at what time will the work be finished ?

(a) 11 : 30 am (b) 12 noon (c) 12 : 30 pm (d) 1 pm

42. 10 men can complete a piece of work in 15 days and 15 women can complete the same work in 12 days. If all the 10 men and 15 women work together, in how many days will the work get completed ?

(a) 6 (b) 613 (c) 6 2 3 (d) 7 2 3

43. Three men, four women and six children can complete a work in seven days. A woman does double the work a man does and a child does half the work a man does. How many women can complete this work in 7 days ?

(a) 7 (b) 8 (c) 12 (d) Cannot be determined

44. 12 men can complete a piece of work in 4 days, while 15 women can complete the same work in 4 days. 6 men start working on the job and after working for 2 days, all of them stopped working. How many women should be put on the job to complete the remaining work, If it is to be completed in 3 days ?

(a) 15 (b) 18 (c) 22 (d) Data inadequate

45. If 6 men and 8 boys can do a piece of work in 10 days while 26 men and 48 boys can do the same in 2 days, the time taken by 15 men and 20 boys in doing the same type of work will be:

(a) 4 days (b) 5 days (c) 6 days (d) 7 days

46. A contract is to be completed in 46 days and 117 men were set to work, each working 8 hours a day. After 33 days, 4/7 of the work is completed. How many additional men may be employed so that the work may be completed in time, each man now working 9 hours a day ?

(a) 80 (b) 81 (c) 82 (d) 83

**ANSWER:**

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| --- | --- | --- | --- | --- | --- |
| 2. 12, 15 | 10. C | 18. A | 26. C | 34. D | 42. C |
| 3. 48, 60 | 11. 2500, 2000 | 19. C | 27. B | 35. B | 43. A |
| 4. 12, 16 | 12. 6000, 1000 | 20. B | 28. A | 36. B | 44. A |
| 5. A | 13. C | 21. A | 29. D | 37. D | 45. A |
| 6. D | 14. C | 22. D | 30. D | 38. C | 46. B |
| 7. | 15. D | 23. B | 31. A | 39. B |  |
| 8. 380 | 16. A | 24. A | 32. C | 40. A |  |
| 9. C | 17. D | 25. D | 33. C | 41. D |  |