## **Ratio Class Sheet**

- 1. The sum of three numbers is 98. If the ratio of the first to second is 2:3 and that of the second to the third is 5:8, then the second number is:
- **3.** If the numbers of Apple to Banana to Kiwi is in the ratio of 2:5:11 and the number of banana is 45 more than that of Apples, then how many Kiwis are there?
- **4.** There are five more computers in the office than employees. If there are 10 employees in the office, what is the ratio of computers to employees in the office?
  - (A) 2 : 3
  - (B) 2:5
  - (C) 3:2
  - (D) 3:5
  - (E) 5:2
- **5.** A team played 60 games, of which it won 40% games. 4 games were a tie. What part of the games played did the team lose?
  - (A) 8/15
  - (B) 3/10
  - (C) 3/5
  - (D) 7/3
- **6.** Ratio of 2 numbers is 5:4. When both the numbers are increased by 10 then their ratio becomes 7:6. Find the numbers?
- 7. If numerator of a fraction is increased by 25% and Denominator is decreased by 10 %,, then it becomes 5/9 Find original Fraction?
- **8.** The ratio of the number of boys and girls in a school is 5:4. If 18 new boys, which is 5% of total students, joins the class. What fraction of girls is now in the school?
- **9.** 5 years ago, ratio of ages of Andy, Cathy and Wayne is 2:3:5. If Sum of their present ages 75 years. Find present age of Andy.
- 5 years ago, ratio of ages of Father and Son was2. 4 years hence ratio of their ages will be 3:1. Find present age of Son?
- **11.** A amount of Rs. 735 was divided between A, B and C. If each of them had received Rs. 25 less, their shares would be in the ratio of 1:3:2. Find the share of C.
  - (A) Rs. 170
  - (B) Rs. 195
  - (C) Rs. 220
  - (D) Rs. 245
  - (E) 270
- **12.** The ratio of Dough to cream in a cake is 3:5. If the quantity of cream is increased by 60%, Find percentage of Dough in the cake?
- **13.** 40 litres of Solution contains Water and Lime in the ratio of 4: 1. Find Values for following.
  - (A) If 6 litre Solution is removed, then ratio of Water and Lime Now
  - (B) If 10 litre Solution is removed and replaced by water, Find ratio of Water and Lime Now

- **14.** In a mixture of 60 litres, the ratio of milk and water is 2:1. If this ratio is to be 1:2, then the quantity of water to be further added is:
- **15.** (i)  $\frac{a}{b} = \frac{1}{2}$ ;  $\frac{a}{c} = \frac{2}{3}$ , then  $\frac{a}{b+c} = ?$ 
  - (ii) a:b = 3:4, b:c = 8:9, c:d = 10:7 & d:e = 14:3. Find a:e?
- **16.** Jack was planting a tree. He was to dig a hole that was 3 feet deep for every 5 feet of tree height. How deep should he dig the hole for a tree that is 17 feet high?
- 17. A person distributed "N" number of chocolates among 4 children in the ratio  $\frac{1}{2} : \frac{1}{3} : \frac{1}{5} : \frac{1}{8}$ , then

Which of the following could be the N?

- (A)254
- (B)278
- (C)328
- (D)382
- **18.** The positive mean proportional between 64 and 81 is  $6 + \lambda$
- 19. Cost of cylinder is directly proportional to cube of the radius. If radius is tripled then cost of cylinder increases by how many times?
- **20.** Cost of Plutonium is directly proportional to square of its weight. A 40 gms plutonium costs \$16000. It breaks into 3 parts in ratio 1:2:5. Find reduction in cost due to breakage.
- **21.** Oscillation of a pendulum is inversely proportional to square root of its Weight. A 25 gms pendulum oscillates for 40 times then, how many times a 16 gms pendulum will oscillates for?
- 22. Telephone bill of Mr. Mittal is partly fixed and partly varies linearly with the number of outgoing calls. If the number of outgoing calls is 200, bill generates for \$600, But for 400 calls, it costs \$800. Find costs for Mr. Mittal if he makes 800 outgoing calls?
- **23.** X,Y, Z started a new venture by investing 20,000 each. After 3 months, Mr. X left the business and after 6 months Mr. Y also left the business, But Mr. Z stayed for whole year. After a year, total profit generated in the business was \$3500. Find each partner's share.
- 24. \$ 600, is distributed among A, B, C such that A gets half as much as what B and C gets together. B gets two- third as much as what C and A gets together. Find share of A?
- **25.** Income of X and Y is in ratio 5: 4 and their expenses are in the ratio of 3: 2 respectively. If Mr. X could be able to save \$10,000. Find Savings of Mr. Y2



## Ratio

1. 30	2. 105	3. 165	4. C	5. A
6. 25,20	7. $\frac{2}{5}$	8. $\frac{89}{189}$	9. 17	10. 41
11. D	12. 27.27	13. No change, 17:3	14. 60	15. $\frac{2}{7}, \frac{40}{9}$
16. $\frac{51}{5}$	17. B	18. 72	19. 26	20. 8500
21. 50	22. 1200	23. 500,1000,2000	24. 200	25. CNBD