**Ratio and Proportion**

**1.** Two numbers are respectively 20% and 50% more than a third number. The ratio of the two numbers is:

A. 2: 5 B. 3: 5 C. 4: 5 D. 5: 4

**2.** A and B together have Rs.1210. If of A's amount is equal to of B's amount, how much amount does B have?

A. Rs.460 B. Rs.484 C. Rs.550 D. Rs.664

**3.** A sum of Rs.312 was divided among 100 boys and girls in such a way that the boy gets Rs.3.60 and each girl Rs.2.40 the number of girls is

A. 35 B. 40 C. 45 D. 50

**4.** A sum of Rs.36.90 is made up of 180 coins which are either 10 paise coins or 25 p coins. The number of 10 p coins is:

A. 48 B. 54 C. 56 D. 60

**5.** A bag contains 50 P, 25 P and 10 P coins in the ratio 5: 9: 4, amounting to Rs.206. Find the number of coins of each type respectively.

A. 360, 160, 200 B. 160, 360, 200 C. 200, 360,160 D. 200,160,300

**6.** The ratio of the number of boys and girls in a college is 7: 8. If the percentage increase in the number of boys and girls be 20% and 10% respectively, what will be the new ratio?

A. 8:9 B. 17:18 C. 21:22 D. None

**7.** The salaries A, B, C are in the ratio 2: 3: 5. If the increments of 15%, 10% and 20% are allowed respectively in their salaries, then what will be new ratio of their salaries?

A. 3:3:10 B. 10:11:20 C. 23:33:60 D. None

**8.** Seats for Mathematics, Physics and Biology in a school are in the ratio 5: 7: 8. There is a proposal to increase these seats by 40%, 50% and 75% respectively. What will be the ratio of increased seats?

A. 1:2:3 B. 2:3:4 C. 3:4:5 D. 4:5:6

**9.** 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:

A. 20 B. 30 C. 48 D. 58

**10.** A, B and C play cricket. A's runs are to B's runs and B's runs are to C's as 3:2. They get altogether 342 runs. How many runs did A make?

A. 162 B. 108 C. 72 D. None

**11.** Rs.432 is divided amongst three workers A, B and C such that 8 times A’s share is equal to 12 times B’s share which is equal to 6 times C’s share. How much did A get?

A. Rs.192 B. Rs.133 C. Rs.144 D. Rs.128

**12.** A sum of Rs.427 is to be divided among A, B and C such that 3 times A’s share, 4 times B’s share and 7 times C’s share are all equal. The share of C is:

A. 84 B. 140 C. 196 D. 240

**13.** An outgoing batch of students wants to gift a PA system worth Rs 4,200 to their school. If the teachers, offer to pay 50% more than the students and an external benefactor gives three times the teacher's contribution, then how much should the teachers donate?

A. Rs 600 B. Rs 840 C. Rs 900 D. Rs 1,200

**14.** Points A and B are both in the line segment PQ and on the same side of its midpoint. A divides PQ in the ratio 2:3, and B divides PQ in the ratio 3:4. If AB=2, then the length of PQ is:

A. 70 B. 75 C. 80 D. 85

**15.** On a certain day, the ratio of the passenger in the 1st class and the second class travelling by train is 1:3. The ratio of the fares collected from each first class and second class passengers is 30:1. If the total amount collected from all the passengers is Rs 1,320. Find the amount in Rs, collected from the second class passengers.

A. 240 B. 360 C. 480 D. 120

**16.** A mixture contains alcohol and water in the ratio 4: 3. If 5 liters of water is added to the mixture, the ratio becomes 4: 5. Find the quantity of alcohol in the given mixture.

A. 10 B. 12 C. 15 D. 18

**17.** The proportion of milk and water in 3 samples is 2: 1, 3: 2 and 5: 3. A mixture comprising of equal quantities of all 3 samples is made. The proportion of milk and water in the mixture is:

A. 2:1 B. 5:1 C. 99:61 D. 227:133

**18.** 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?

A. 38000 B. 46800 C. 36700 D. 50000

**19.** The monthly salaries of two persons are in the ratio of 4: 7. If each receives an increase of Rs.25 in the salary, the ratio is altered to 3: 5. Find their respective salaries.

A. 120 and 210 B. 80 and 140 C. 180 and 300 D. 200 and 350

**20.** The Students in three classes are in the ratio 2: 3: 5. If 20 students are increased in each class, the ratio of changes to 4: 5: 7. The total number of students before the increase was

A. 100 B. 150 C. 120 D. 90