Ratio and Proportion

1. The Monthly incomes of X and Y are Rs. 6000 and Rs. 8000 respectively. There expenses are 75% and 60% respectively. Find the ratio of their savings.
(A) 32:15   (B) 15:32
(C) 45:32   (D) 16:45
(E) 8:15

2. The ratio between Sagar's and Praneeti's age at present is 2:3. Sagar is 7 years younger than Praneeti. The ratio of Sagar's age to Praneeti's age after 10 years will be:
(A) 11:23   (B) 27:35
(C) 24:31   (D) 3:8
(E) None of these

3. In a class of 100 students, the ratio of boys to girls is 3:2. The number of students who passed in an exam to those who have failed is in the ratio of 7:3. Among the girls, the ratio of failed to passed candidates is 3:5. What is the ratio of boys who passed to those who have failed?
(A) 1:3   (B) 2:3
(C) 3:7   (D) 3:1
(E) 4:5

4. A and B earn in the ratio of 8:9. They spend in the ratio of 5:7 and their savings is in the ratio of 9:7. If their total monthly expenditure is Rs. 8400, then the annual salary of B is?
(A) Rs. 84672   (B) Rs. 77526
(C) Rs. 80154   (D) Rs. 75256
(E) Rs. 87458

5. In an orphanage, apples, oranges and strawberries are distributed among orphans in the ratio of 5:1:6 in terms of dozen. The weight of a strawberry is 30 gm and weight of an apple to an orange is 5:4, if the weight of an apple is 200 gm. Find the ratio of all three fruits in terms of weight, that an orphan gets?
(A) 100:20:120   (B) 20:16:3
(C) 360:75:215   (D) 85:15:3
(E) 50:8:9

6. At the start of a debating competition, the ratio of number of male participants to the number of female participants was 2:1. During the food break, the number of male participants reduced by 10 and female participants increased by 4 making the new ratio of male to female participants 3:2. What was the total number of participants at the starting of the debating competition?
(A) 64   (B) 96
(C) 108   (D) 106
(E) None of these

7. In a bag, there are 25P, 50P and 1 Re. coins in the ratio 2 : 1 : 3. If there are Rs. 100 in all, how many 25P, 50P and 1 Re. coins are there in the bag?
(A) 50, 25, 75   (B) 48, 24, 72
(C) 40, 20, 60   (D) 60, 30, 90
(E) 64, 32, 96

8. If a teacher distributes some sweets among his four students in the ratio of $\frac{1}{3}:\frac{1}{5}:\frac{1}{2}:\frac{1}{4}$, what is the minimum number of sweets that teacher must have?
(A) 76   (B) 77
(C) 71   (D) 82
(E) None of these

9. A bag contains 1rupee, 50paise and 20paise coins in a ratio 2:4:5. If the bag contains a total Rs. 225. Find the total no. of 50 paise and 20 paise coins.
(A) 405   (B) 387
(C) 415   (D) 390
(E) None of these

10. A box contain coins of 1rupee,50p,25p in the ratio 4:5:6. If total amount in the box is 160/-, then find the number of 25p coins.
(A) If answer is divisible by 2 or 7
(B) If answer is divisible by 3 or 9 or 11
(C) if answer is divisible by 5 or 7 or 10
(D) if answer is a prime number or not an integer
(E) If answer is divisible by 2 or 4 or 6 or 8

11. A man had Rs. 3000 with him. He kept Rs. 250 with him and distributed the rest. The ratio of A and B was 5 : 6. The ratio of B and C was 3 : 4 and the ratio of C and D was 4 : 3. Find the amount which C got.
(A) Rs. 780 (B) Rs. 875
(C) Rs. 880 (D) Rs. 900
(E) Rs. 760

12. The number of physics, chemistry and biology books are in the ratio of 4:6:7 in a library. The weight of a chemistry book is 50 gms while the weights of physics and biology book is in the ratio of 4:3. It is given that the weight of a biology book is 75 gms. What is the ratio of all the books in library in terms of weight?
(A) 12:21:16 (B) 11:21:15
(C) 21:11:15 (D) 3:7:11
(E) 16:12:21

13. The ratio of present ages of son and daughter of a lady is in the ratio of 5:6 and the age of lady is sum total of ages of her daughter and son. If the ratio of ages of son after 5 years and the age of daughter 8 years ago is 5:4 then what will be the ratio of the present age of lady and the age of her son after three years?
(A) 1:1 (B) 1:2
(C) 2:1 (D) 2:3
(E) 3:4

14. In a village 64% of population is literate. The ratio of literate males to literate females is 5 : 3 and the ratio of illiterate males to illiterate females is 4 : 5. The number of illiterate males in the village is what percent of the literate females in the village?
(A) 40% (B) 75%
(C) 60% (D) 72.5%
(E) 66.67%

15. Some sweets were distributed among four friends P, Q, R and S such that the ratio of sweets received by P to those received by R was 6 : 7. Q received 26 more sweets than P, and S receives 32 more sweets than R. If Q receives 18 more sweets than R, then how many sweets did S receive?
(A) 84 (B) 81
(C) 78 (D) 88
(E) 82

16. The ratio of the present age of Sita and Geeta is 5 : 7. Six years ago the ratio of 1/3 of Sita's age at that time and 1/3 of Geeta's age at that time was 2 : 3. What will be the ratio of Sita's age to Geeta's age six years from now?
(A) 1 : 3 (B) 1 : 2
(C) 4 : 3 (D) 3 : 4
(E) 3 : 1

17. The ratio of present age of Rahul to that of Deepa is 5:6. The present age of a lady is equal to sum of present ages of Deepa and Rahul. If the ratio of age of Rahul after 3 years to the age of Deepa 6 years ago is 3:2, then what will be the ratio of the present age of the lady to the age of Deepa after four years?
(A) 4:5 (B) 5:3
(C) 6:5 (D) 3:2
(E) None of these

18. The total number of men, women and children working in a factory is 18. They earn Rs. 8000 in a day. If the sum of the wages of all men, all women and all children

is in the ratio of 18 : 10 : 12 and if the wages of an individual man, women and child is in the ratio of 6 : 5 : 3, then how much a women earns in a day?

(A) Rs. 500   **(B)** Rs. 400
(C) Rs. 250   **(D)** Rs. 300
(E) None of these

19. In a Temple every devotee offers fruits to the orphans. Thus every orphan receives bananas, oranges and mangoes in the ratio of 4 : 3 : 5 in terms of dozen. The weight of a mango is 36 gram and weight of a banana and an orange are in the ratio of 6 : 7, while the weight of an orange is 140 gram. Find the ratio of all the three fruits in terms of weight that an orphan gets.

(A) 24 : 18 : 9   **(B)** 8 : 7 : 5
(C) 8 : 7 : 3   **(D)** 120 : 115 : 55
(E) None of these

20. Anu is six times as old as her daughter Ritu and Anu's husband Neerav is 27 years older than Ritu. Five years ago, the difference between five times the age of Neerav and four times the age of Anu was 35. What will be the respective ratio of Anu's age 12 years hence and Neerav's age 16 years hence?

(A) 6:7   **(B)** 7:8
(C) 5:7   **(D)** 8:11
(E) 7:6