

Ratio and Proportion Test

Instruction: In the following questions, select the correct choice among the alternatives given below the question.

1. Find the third proportional to the number 5 and 10.
(a) 20 (b) 2.5 (c) 25 (d) 30
2. A bag contains an equal number of one rupee, 50 paise and 25 paise coins respectively. If the total value is Rs. 35, how many coins of each type are there?
(a) 20 (b) 16 (c) 18 (d) 25
3. If $a : b = c : d$, then the value of $\frac{a^2+b^2}{c^2+d^2}$ is :
(a) $\frac{1}{2}$ (b) $\frac{a+b}{c+d}$ (c) $\frac{a-b}{c-d}$ (d) $\frac{ab}{cd}$
4. If $x : y = 2 : 3$, find the value of $(3x + 2y) : (2x + 5y)$.
(a) $\frac{12}{25}$ (b) $\frac{11}{27}$ (c) $\frac{12}{19}$ (d) $\frac{11}{23}$
5. If $A : B = 3 : 4$, $B : C = 8 : 9$, $C : D = 15 : 16$. Find $A : B : C : D$.
(a) 15: 20: 21: 28 (b) 30: 40: 45: 48
(c) 9: 15: 21: 28 (d) none of these
6. A dog pursues a cat and takes 5 leaps for every 6 leaps of the cat, but 4 leaps of the dog are equal to 5 leaps of the cat. Compare the speeds of the dog and the cat.
(a) 15: 22 (b) 9: 25 (c) 25: 21 (d) 25: 24
7. What should be subtracted from each of the numbers 54, 71, 75 and 99, so that the remainders are in continued proportion:
(a) 9 (b) 7 (c) 4 (d) 3
8. Divide 170 into three parts such that the first part is 10 more than the second and its ratio with third part is 2:5
(a) 22: 35: 113 (b) 35: 55: 80 (c) 40: 30: 100
(d) 35: 65: 70
9. Gold is 19 times as heavy as water and copper 9 times as heavy as water. In what ratio should these metals be mixed so that the mixture may be 15 times as heavy as water?
(a) 2: 5 (b) 2: 3 (c) 3: 1
(d) 3: 2

- 10.** A mixture of 729 mL contains milk and water in the ratio 7: 2. How much more water is added to get a new mixture containing milk and water in the ratio 7: 3?
- (a) 81 mL (b) 72 mL (c) 80 mL (d) 78 mL
- 11.** A mixture contains alcohol and water in the ratio 4: 3. If 8L water is added to the mixture, the ratio of alcohol and water becomes 3: 5 find the quantity of alcohol in the mixture.
- (a) $\frac{96}{11}$ L (b) $\frac{72}{11}$ L (c) $\frac{168}{11}$ L (d) none of these
- 12.** In three vessels of 10L capacity, mixture of milk and water is filled. The ratio of milk and water are 2:1, 3:1 and 3: 2 in the respective vessels. If all the three vessels are emptied into a single large vessel, find the ratio of milk and water in the resultant mixture.
- (a) 121:41 (b) 117: 22 (c) 121: 59 (d) 127: 41
- 13.** Ratio of boys to the girls in a class is 5: 4. Which of the following cannot be the number of students in the class?
- (a) 45 (b) 72 (c) 108 (d) 98
- 14.** A person buys some apples and mangoes from the market at a rate such that a mango is twice as costly as an apple and he sells them such that a mango is thrice the price of an apple. By selling an apple at twice of its cost price, he makes 150% profit on the whole. Find the ratio of mangoes to apples?
- (a) 3: 5 (b) 3: 4 (c) 1: 2
(d) none of these
- 15.** The ratio of spirit and water in a mixture is 1: 3, if the volume of the solution is increased by 25% by adding spirit only. What is the resultant ratio of spirit and water?
- (a) 2:3 (b) 1:4 (c) 1:2
(d) none of these
- 16.** In a factory men, women and children were employed in the ratio 8: 5: 1 to finish a job and their individual wages were in the ratio 5: 2: 3,. Total daily wages of all amounts to Rs. 318 find the total daily wages paid to each category.
- (a) Rs. 240, 60, 18 (b) Rs. 210, 70, 38

(c) Rs. 190, 95, 33

(d) none of these

17. An amount of money is to be distributed among A, B and C in the ratio 5: 8: 12 respectively. If the total share of B and C is four times that of A. what is A's share?

(a) Rs. 3000

(b) Rs. 5000

(c) cannot be determined

(d) none of these

18. The ratio of the ages of A and B is 5: 7. If the difference between the present age of B and that of A 6 years hence is 2, then what is the total of present ages of A and B?

(a) 49 years

(b) 52 years

(c) 56 years

(d) none of these

19. If there are Rs. 495 in a bag in denominations of one-rupee, 50 paisa and 25 paisa coins. Which are in the ratio 1: 8: 16. How many 50 paisa coins are there in the bag?

(a) 50

(b) 220

(c) 440

(d)

none of these

20. Two numbers are in the ratio 3: 5. If each number is increased by 10, the ratio becomes 5: 7. The numbers are:

(a) 3, 5

(b) 7, 9

(c) 13, 22

(d)

15, 25

Answers to the above questions

Questions no.	Answers
1.	(a)
2.	(a)
3.	(d)
4.	(c)
5.	(b)
6.	(d)
7.	(d)
8.	(c)
9.	(d)
10.	(a)
11.	(a)
12.	(c)

13.	(d)
14.	(c)
15.	(a)
16.	(a)
17.	(c)
18.	(d)
19.	(c)
20.	(d)

LawGiri