

PRACTICE TEST PAPER - 2026

Subject: Mathematics **Class:** 7

Chapter: Ratio and Proportion

Test Code: 2026 : Ratio and Proportion : 7 : 004

Level: Intermediate to Advance **Time:** 45 Minutes

Instructions: Select the most appropriate option for each of the following 15 Multiple Choice Questions. Each question carries equal marks.

Q1. Simplify the ratio of 1.2 m : 90 cm : 2 m to its simplest form.

- (A) 12 : 9 : 20
- (B) 4 : 3 : 5
- (C) 120 : 90 : 200
- (D) 4 : 3 : 6.6

Q2. If $A : B = 2 : 3$ and $B : C = 4 : 5$, find the value of the ratio $A^2 : B^2 : BC$.

- (A) 16 : 36 : 45
- (B) 64 : 144 : 180
- (C) 4 : 9 : 15
- (D) 16 : 45 : 36

Q3. What number must be subtracted from each of the numbers 10, 12, 19, and 24 so that the resulting numbers are in proportion?

- (A) 2
- (B) 3
- (C) 4
- (D) 5

Q4. If x is the mean proportional between 12 and 75, find the value of $\frac{x}{15} + 8$.

- (A) 10
- (B) 12
- (C) 30
- (D) 15

Q5. A piece of work can be completed by 8 workers in 12 days. How many **additional** workers are required to finish the same work in just 8 days?

- (A) 4
- (B) 12
- (C) 6
- (D) 8

Q6. If $x : y = 3 : 5$, calculate the value of the ratio $(x^2 + y^2) : (y^2 - x^2)$.

- (A) 17 : 8
- (B) 34 : 16
- (C) 17 : 9
- (D) 8 : 17

Q7. A sum of Rs. 7,600 is divided into two parts in the ratio $\frac{1}{3} : \frac{1}{5}$. The difference between the two parts is:

- (A) Rs. 1,900
- (B) Rs. 2,850
- (C) Rs. 950
- (D) Rs. 3,800

Q8. The scale of a map is 1 : 5,000,000. If the distance between two cities on the map is 4.5 cm, find the actual distance in kilometers.

- (A) 22.5 km
- (B) 225 km
- (C) 2250 km
- (D) 2.25 km

Q9. In a 80 kg alloy of Zinc and Copper, the ratio of Zinc to Copper is 5 : 3. How much Copper should be added to the alloy so that the ratio becomes 4 : 5?

- (A) 22.5 kg
- (B) 30 kg
- (C) 32.5 kg
- (D) 20 kg

Q10. If three numbers a, b, c are in continued proportion, then the ratio $a : c$ is always equal to:

- (A) $a : b$
- (B) $a^2 : b^2$
- (C) $b^2 : a^2$
- (D) $a^2 : c^2$

Q11. If 6 taps of the same size can fill a tank in 1 hour 20 minutes, how long will 8 such taps take to fill the same tank?

- (A) 1 hour
- (B) 40 minutes
- (C) 1 hour 10 minutes
- (D) 50 minutes

Q12. The ratio of the income of A to that of B is 9 : 7 and the ratio of their expenditures is 4 : 3. If each of them saves Rs. 2,000 per month, find the monthly income of A.

- (A) Rs. 18,000
- (B) Rs. 14,000
- (C) Rs. 20,000
- (D) Rs. 16,000

Q13. A mixture contains milk and water in the ratio 7 : 3. If 5 litres of water is added to the mixture, the ratio becomes 2 : 1. The original quantity of milk in the mixture was:

- (A) 70 litres
- (B) 35 litres
- (C) 50 litres
- (D) 21 litres

Q14. Two numbers are in the ratio 3 : 5. If 8 is added to the first and 7 is subtracted from the second, the ratio becomes 2 : 3. Find the original numbers.

- (A) 30, 50
- (B) 24, 40
- (C) 36, 60
- (D) 18, 30

Q15. If the speed of a car is increased in the ratio 5 : 6, the time taken to cover the same distance will decrease in the ratio:

- (A) 5 : 6
- (B) 6 : 5
- (C) 25 : 36
- (D) 36 : 25

— End of Question Paper —