

BLOGS

Sectional Test on Quantitative Techniques for CLAT UG [Part 8]

Aditiya Aryan · 09 Feb 2026

Q1. A group of eight numbers has an average of 46. If one number is excluded, the average of the remaining seven numbers drops to 42. Determine the value of the number that was taken out.

- a. 74
- b. 78
- c. 82
- d. 86

Q2. An article is marked by a shopkeeper at ₹2,400. A 20% discount is applied to this price. Despite offering the discount, the shopkeeper still achieves a 20% profit. Calculate the original cost price of the article.

- a. ₹1,400
- b. ₹1,500
- c. ₹1,600
- d. ₹1,800

Q3. A college has students where the proportion of boys to girls is 5 to 7. Given that the total enrollment is 720 students, determine the total number of boys in the college.

- a. 250
- b. 280
- c. 300
- d. 320

Q4. A train travels a specific distance in 5 hours when moving at a speed of 60 km/h. If the speed is increased to 75 km/h, what would be the time required to travel the identical distance?

- a. 3 hours
- b. 4 hours
- c. 5 hours
- d. 6 hours

Q5. What is the average age of the four people remaining, given that the average age of ten people is 40 years and the average age of the first six of them is 35 years?

- a. 45 years
- b. 47.5 years
- c. 50 years
- d. 52.5 years

Q6. A rectangle has a perimeter of 140 m. If the ratio of its length to breadth is 4 : 1, what is the area of the rectangle?

- a. 1200 sq m
- b. 1225 sq m
- c. 1400 sq m
- d. 1575 sq m

Q7. If a town's population first grows by 20% and then shrinks by 25% the following year, what is the overall percentage change in its population over the two-year period?

- a. No change
- b. 5% increase
- c. 5% decrease
- d. 10% decrease

Q8. Two balls are drawn sequentially, without replacement, from a box that holds 5 white, 7 black, and 8 red balls. What is the likelihood that the two balls selected are both red?

- a. 14/95
- b. 8/95
- c. 7/95
- d. 13/95

Q9. The average of 20 numbers is 30. If the average of the first 12 numbers is 28, what is the average of the remaining 8 numbers?

- a. 32
- b. 33
- c. 34
- d. 35

Q10. A person allocates 45% of their monthly earnings to food expenses and an additional 30% to rent. Given that they save ₹6,250, determine their total monthly income.

- a. ₹15,000
- b. ₹20,000
- c. ₹22,500
- d. ₹25,000

Q11. If 12 workers can complete a job in 18 days, how many workers are required to complete the same job in 12 days?

- a. 15
- b. 16
- c. 18
- d. 20

Q12. The ratio of two numbers is 5:9. Given that their difference is 80, find the greater of the two numbers.

- a. 160
- b. 180
- c. 200
- d. 220

Q13. An 8% discount on an article's marked price of ₹1,500 results in a selling price of ₹1,380. How much was the discount?

- a. ₹150
- b. ₹140
- c. ₹130

d. ₹120

Q14. What is the average speed for a car's journey if it covers the first half of the distance at 40 km/h and the remaining half at 60 km/h?

- a. 48 km/h
- b. 50 km/h
- c. 52 km/h
- d. 54 km/h

Q15. A student's average score across 6 subjects is 72. To achieve an average of 75 over 7 subjects, what score is needed in the seventh subject?

- a. 67
- b. 93
- c. 73
- d. 80

Answers

1. Correct Answer: A

Original total = $8 \times 46 = 368$

New total = $7 \times 42 = 294$

Removed number = $368 - 294 = 74$

2. Correct Answer: C

SP after discount = 80% of 2400 = 1920

1920 = 120% of CP

CP = $1920/120 \times 100 = \text{₹}1600$

3. Correct Answer: C

Total parts = 12

1 part = $720/12 = 60$

Boys = $5 \times 60 = 300$

4. Correct Answer: B

Distance = $60 \times 5 = 300$ km

Time = $300/75 = 4$ hours

5. Correct Answer: B

$$\text{Total age} = 10 \times 40 = 400$$

$$\text{Age of first 6} = 6 \times 35 = 210$$

$$\text{Remaining age} = 400 - 210 = 190$$

$$\text{Average} = 190/4 = \mathbf{47.5 \text{ years}}$$

6. Correct Answer: B

$$\text{Perimeter} = 140 \Rightarrow L + B = 70$$

$$\text{Ratio } L : B = 4 : 1 \Rightarrow \text{total parts} = 5$$

$$1 \text{ part} = 70/5 = 14$$

$$\text{Breadth} = 14 \text{ m}$$

$$\text{Length} = 56 \text{ m}$$

$$\text{Area} = 56 \times 14 = \mathbf{1225 \text{ sq m}}$$

7. Correct Answer: C

$$\text{Net \%} = +20 - 25 - (20 \times 25)/100 = \mathbf{-5\%}$$

8. Correct Answer: A

$$\text{Probability} = (8/20) \times (7/19) = 56/380 = \mathbf{14/95}$$

9. Correct Answer: B

$$\text{Total} = 20 \times 30 = 600$$

$$\text{First 12 total} = 12 \times 28 = 336$$

$$\text{Remaining} = 600 - 336 = 264$$

$$\text{Average} = 264/8 = \mathbf{33}$$

10. Correct Answer: D

$$\text{Spent} = 75\%, \text{ Savings} = 25\%$$

$$\text{Income} = 6250 \times 4 = \mathbf{₹25,000}$$

11. Correct Answer: C

$$\text{Work} = 12 \times 18 = 216$$

$$\text{Workers needed} = 216/12 = \mathbf{18}$$

12. Correct Answer: C

Let the numbers be $5x$ and $9x$.

$$\text{Difference} = 9x - 5x = 4x.$$

Given difference = 80, so $4x = 80$

$$x = 20$$

$$\text{Larger number} = 9x = 9 \times 20 = \mathbf{180}$$

13. Correct Answer: D

$$\text{Discount} = 1500 - 1380 = \mathbf{₹120}$$

14. Correct Answer: A

$$\text{Average speed} = (2ab)/(a+b) = (2 \times 40 \times 60)/(100) = \mathbf{48 \text{ km/h}}$$

15. Correct Answer: B

$$\text{Total needed} = 7 \times 75 = 525$$

$$\text{Current total} = 6 \times 72 = 432$$

$$\text{Marks needed} = 525 - 432 = \mathbf{93}$$