

Mathematics

Practice Test Paper 7

(Ganita Prakash Part 2 | Chapter 5: Tales by Dots and Lines)

Class VIII | 2026-27

Time Allowed: 45 Minutes

Maximum Marks: 25

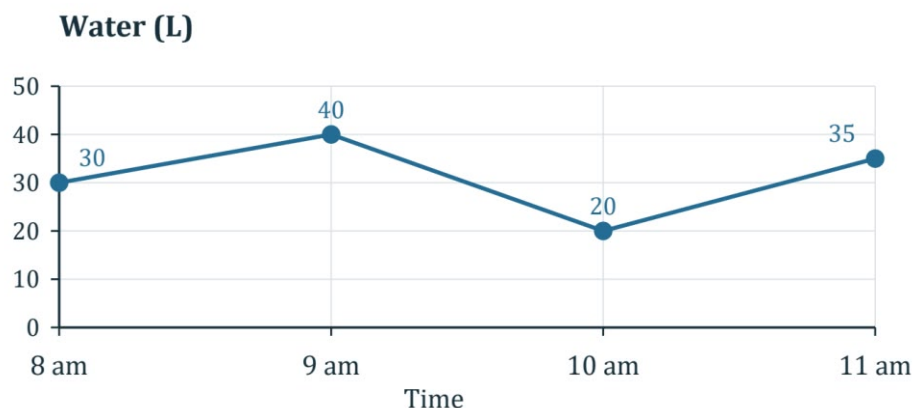
General Instructions

1. All 13 questions are compulsory. The paper has four sections: A, B, C and D.
2. Section A - 5 marks; Section B - 8 marks; Section C - 9 marks; Section D - 3 marks.
3. Choose one correct option in Section A. Show the necessary working in Sections B, C and D.
4. Study the given data and images carefully before answering the related questions.

SECTION A

(5 questions $\times$ 1 mark = 5 marks)

1. Which statement about the mean of a nonempty collection is correct?
(A) It is always one of the values
(B) It cannot exceed the largest value
(C) It always equals the median
(D) It must be a whole number
2. Cells E2:E5 contain 4, 8, 12 and 16. What does =AVERAGE(E2:E5) return?
(A) 4
(B) 8
(C) 40
(D) 10
3. A collection has mean 6. Three new values are added without changing it. Their sum must be:
(A) 6
(B) 18
(C) 9
(D) 12
4. The graph records the water in a tank at four checks. Between which times did the amount fall?



- (A) 10 am and 11 am
(B) 9 am and 10 am
(C) 8 am and 9 am
(D) It never fell

5. A data list has median 7. Must exactly half its values be strictly smaller than 7?

(A) Yes, always

(B) No value can equal the median

(C) Yes, if the list is ordered

(D) No, repeated values can equal 7

SECTION B

(4 questions $\times$ 2 marks = 8 marks)

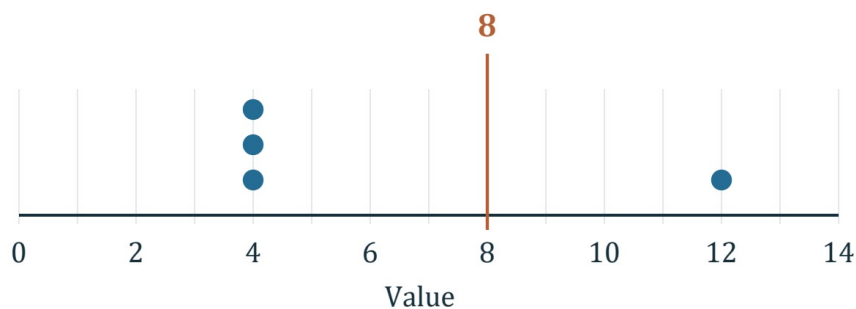
6. The dot plot shows numbers of goals in eight matches. Find the minimum and maximum. Does the plot tell us the order in which the matches were played?



7. The mean of four numbers is 7. Three of them are 2, 7 and 9. Find the fourth number, and decide whether the median equals the mean.

8. A list of six values has mean 12. The first three total 27. Find the mean of the last three.

9. The number line shows a repeated value at 4 and one value at 12. Explain why 8 is not the mean, and find the correct mean.



SECTION C

(3 questions $\times$ 3 marks = 9 marks)

10. Three groups of pupils have 4, 6 and 10 members. Their mean scores are 5, 8 and 7 respectively. Find the mean score of all 20 pupils. Explain why averaging only 5, 8 and 7 is not suitable.

11. A poster claims that the mean of any five multiples of 5 must be a multiple of 5. Test the claim with 5, 10, 15, 20 and 30, then explain your conclusion.

12. The values 5, 8, 12, 16, 19 have mean 12 and median 12. Add the two values 1 and 23. Calculate the new mean and median and explain why both stay unchanged here.

SECTION D

(Application Based Question - 3 marks)

13. The image compares the numbers of entries received in three school competitions. One symbol represents 4 entries.



- (i) Find the number of art entries.
- (ii) Find the combined number of music and drama entries.
- (iii) Find the mean number of entries across the three competitions.