Mathematics

Practice Test Paper 6

(Ganita Prakash Part 2 | Chapter 3: Proportional Reasoning–2)

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 images and tables carefully before answering the related questions.

SECTION A

(5 questions × 1 mark = 5 marks)

1. If the denominator of an RF is doubled while the actual distance stays fixed, its map length becomes:

(A) Double

(B) Half

(C) Four times

(D) Unchanged

2. For the inverse proportion shown, what is y when x = 27?

x	3	6	9
y	18	9	6

(A) 2 (B) 3

(C) 6 (D) 9

3. The ratio 2 : 3 : 5 is multiplied by 0.5. Which ratio results?

(A) 1 : 1.5 : 2.5 (B) 1 : 2 : 3

(C) 2 : 1.5 : 5 (D) 4 : 6 : 10

4. For positive quantities satisfying y = 5x, the constant value of y ÷ x is:

(A) 1 (B) 5

(C) x (D) 5x

5. Which angle should represent 10% of a pie chart?

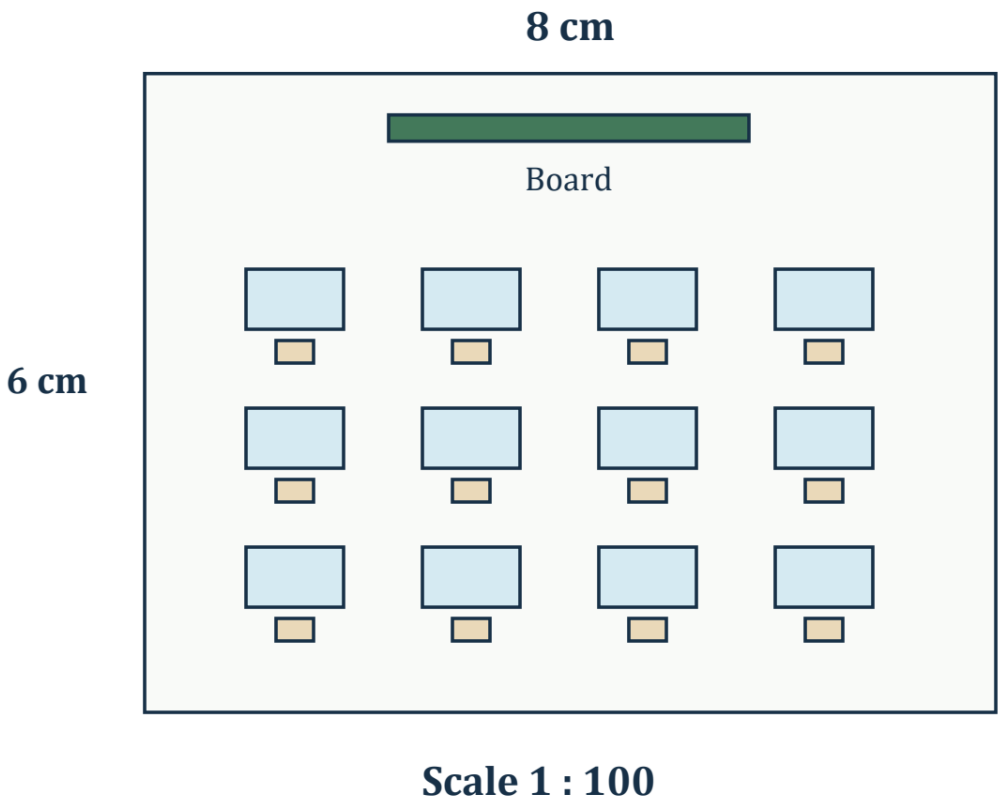
(A) 10° (B) 18°

(C) 36° (D) 100°

SECTION B

(4 questions × 2 marks = 8 marks)

6. The classroom plan uses scale 1 : 100. Find the actual length and width from the marked plan measurements.



7. Sixteen machines complete an order in 15 days. How many machines are needed for 10 days at the same daily output per machine?

8. A mixture has quantities in the ratio 3 : 4 : 5 : 8. The last ingredient weighs 24 g. Find the total mass.

9. A vehicle travels 150 km in 3 hours. Find the time for the same journey at 75 km/h. Explain why the distance must stay fixed for this inverse-proportion calculation.

SECTION C

(3 questions × 3 marks = 9 marks)

10. ₹960 is shared in the ratio 5 : 7 : 12. Find each share and check both the total and the simplified ratio.

11. At a steady reading speed, 18 pages take 30 minutes. Find the time for 45 pages. A pupil calls this inverse proportion because fewer pages take less time. Explain the mistake.

12. Check the pie-chart angle assigned to each category. Identify the incorrect entries and give the corrected angles.

Category	Votes	Proposed angle
A	20	140°
B	15	112°
C	10	72°
D	5	36°

SECTION D

(Application Based Question - 3 marks)

13. A camp's water stock is enough for 75 people for 8 days. Daily use per person is equal and stays fixed, and no water is added or wasted.

(i) Express the stock in person-days.

(ii) How long will it last for 50 people?

(iii) If it must last 10 days, how many people can it supply?