Mathematics

Practice Test Paper 9

(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. A whole W is divided in the ratio a : b : c. The first share is:

(A) $\frac{Wa}{a+b+c}$

(B) $\frac{W}{a}$

(C) $W(a+b+c)$

(D) $\frac{a}{W}$

2. If the number of equal-rate machines is tripled for a fixed order, the time needed is multiplied by:

(A) 3 (B) 2

(C) $\frac{1}{3}$ (D) $\frac{3}{2}$

3. The measurements should all use the same map scale. Which row is inconsistent with the other two?

Row	Map length (cm)	Ground length (km)
A	3	12
B	5	20
C	2	9

(A) A (B) B

(C) C (D) None

4. Which ratio has a total of 12 parts?

(A) 2 : 3 : 4 (B) 2 : 4 : 6

(C) 1 : 3 : 5 (D) 3 : 4 : 6

5. In a pie chart, category P has twice the count of category Q. Their angles are in the ratio:

(A) 1 : 2 (B) 2 : 1

(C) 4 : 1 (D) 1 : 1

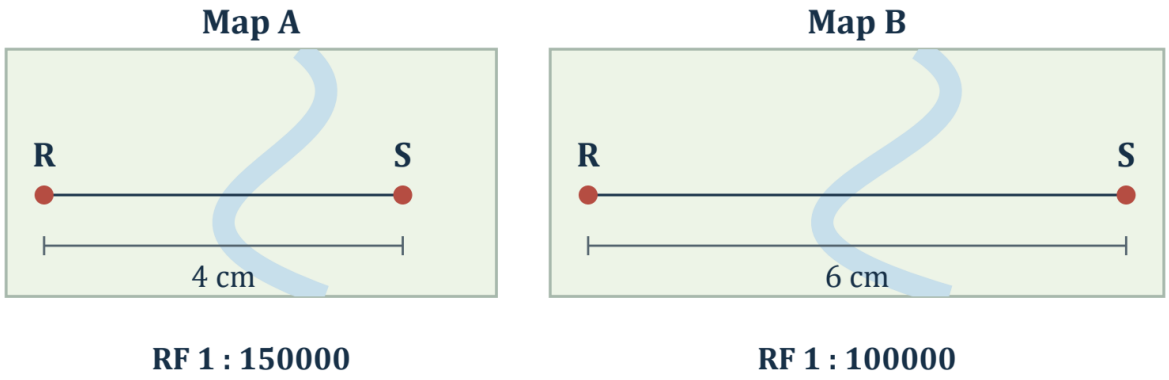
SECTION B

(4 questions × 2 marks = 8 marks)

6. A triangle's angles are in the ratio 4 : 5 : 6. Find the greatest angle and decide whether all three angles are acute.

7. Two pupils obtain very different ground distances from the same map. State two checks they should make before deciding that the map is wrong.

8. Two maps show the same pair of places with the lengths and RFs marked below. Calculate the ground distance from each and decide whether the maps agree.



RF 1 : 150000 **RF 1 : 100000**

9. Two positive quantities are inversely proportional. When x = 1.5, y = 20. Find y when x = 2.5.

SECTION C

(3 questions × 3 marks = 9 marks)

10. Twelve workers can finish a job in 18 days. They work for 6 days, then the remaining work must be finished in 8 days. How many equal-rate workers are needed for the remaining work?

11. Use the table to decide whether y is directly or inversely proportional to x, and do the same for z. Then find both values when x = 8.

x	y	z
2	6	12
4	12	6
6	18	4

12. ₹1260 is to be divided in the ratio 2 : 4 : 3. A pupil gives each person ₹420 because there are three people. Explain the error and find the correct shares.

SECTION D

(Application Based Question - 3 marks)

13. The fixed hire charge for a bus is ₹7200, shared equally among the passengers.

(i) Find each passenger's payment if there are 24 passengers.

(ii) Find each payment if there are 30 passengers.

(iii) How much less does each person pay in the second arrangement?