Mathematics

Practice Test Paper 5

(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. Write $\frac{1}{2} : \frac{1}{3} : \frac{1}{6}$ as a simplest whole-number ratio.

(A) 1 : 2 : 3
(B) 3 : 2 : 1
(C) 2 : 3 : 6
(D) 6 : 3 : 2

2. A map has RF 1 : 200000. A 0.5 cm line represents:

(A) 100 m
(B) 500 m
(C) 1 km
(D) 10 km

3. If an inverse-proportion pair changes from x to 3x, the matching value changes from y to:

(A) 3y
(B) $\frac{y}{3}$
(C) y + 3
(D) y − 3

4. Which information is needed to turn a pie-chart angle into an actual number of people?

(A) The circle's radius
(B) The total number of people
(C) The page width
(D) The chart's colour

5. Which extra pair follows the same inverse proportion as the table?

x	3	5	9
y	15	9	5

(A) (15, 3)
(B) (15, 5)
(C) (10, 9)
(D) (5, 5)

SECTION B

(4 questions × 2 marks = 8 marks)

6. A tank supplies 20 families for 6 days. Ten more families arrive. State two assumptions needed before using inverse proportion to predict how long the water will last.

7. The angles of a triangle are in the ratio 2 : 2 : 5. Find all three angles and decide whether the triangle is obtuse.

8. The workers have equal daily output. Use the table to find the daily output of 20 workers and explain whether the relationship is direct or inverse.

Workers	5	10	15
Bricks in one day	1200	2400	3600

9. Books in three languages are in the ratio Hindi : English : Tamil = 4 : 5 : 3. If there are 75 English books, find the Hindi and Tamil counts.

SECTION C

(3 questions × 3 marks = 9 marks)

10. On a map, 6 cm represents 18 km. Find the RF. The whole map is then enlarged so that every length doubles. Find the new RF and explain why the ground distance is unchanged.

11. Pump A and Pump B can fill the same empty tank separately in the times shown. Find the fraction filled in one hour when both work together, then find the total filling time in hours and minutes. Assume steady rates and no leakage.



12. A 60° sector represents 30 pupils in a survey. Find the total number of pupils and the number represented by a 90° sector.

SECTION D

(Application Based Question - 3 marks)

13. A drink uses lemon juice, syrup and water in the ratio 1 : 2 : 7. There are 3 L of lemon juice, 4 L of syrup and 20 L of water. Make the largest possible batch without changing the ratio.

(i) Which ingredient runs out first?

(ii) How many litres of drink can be made?

(iii) How much water remains?