# Mathematics

## Practice Test Paper 10

### (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.** In an inverse proportion, x is multiplied by 1.5. By what factor must y be multiplied?

(A) $\frac{3}{2}$ (B) $\frac{2}{3}$

(C) 0.5 (D) 2

**2.** Two classes have 30 and 60 pupils. The same 120° sector represents readers in each class. Which statement is correct?

(A) The reader counts are equal

(B) The second class has twice as many readers

(C) The first class has twice as many readers

(D) Both classes have 120 readers

**3.** Which is the main purpose of a pie chart?

(A) To show parts of a whole

(B) To measure road length

(C) To find map directions

(D) To list every individual name

**4.** To preserve a ratio with four terms, which operation is valid?

(A) Add the same number to each term

(B) Multiply only the largest term

(C) Divide every term by the same positive number

(D) Reverse only the first two terms

**5.** The table describes different speeds for one journey. What is its fixed distance?

| Speed (km/h) | 20 | 30 | 40 |
|---|---|---|---|
| Time (h) | 6 | 4 | 3 |

(A) 60 km (B) 90 km

(C) 120 km (D) 240 km

## SECTION B

(4 questions × 2 marks = 8 marks)

**6.** Check whether the relation between x and y is direct proportion. Find the missing value and state the constant quotient y ÷ x.

| x | 3 | 5 | 6 | 8 |
|---|---|---|---|---|
| y | 9 | 15 | 18 | ? |

**7.** A distance of 8 mm is marked on a plan with RF 1 : 500. Find the actual distance in metres.

**8.** The ratios 2 : 3 : 4 : 5 and 6 : 9 : x : 15 are proportional. Find x and show that every corresponding term uses the same factor.

**9.** Rice and dal are mixed in the ratio 3 : 1. Write dal : rice. If 2 cups of dal are used, find the rice quantity and the combined quantity.

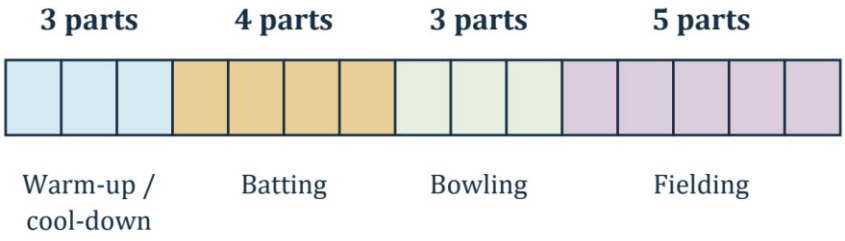
## SECTION C

(3 questions × 3 marks = 9 marks)

**10.** Two workers can finish a job alone in 6 hours and 8 hours. If they work together for 2 hours at steady rates, what fraction is completed and what fraction remains?

**11.** A quantity W is shared in the ratio 2 : 3 : 5. Show that the first two shares together equal the third for any W. Verify this when W = 140.

**12.** The strip shows the ratio of time spent on four cricket-practice activities. Fielding takes 10 minutes more than batting. Find the total session length and the times for warm-up/cool-down and fielding.



## SECTION D

(Application Based Question - 3 marks)

**13.** A spice recipe uses coriander seeds, red chillies, toor dal and fenugreek in the quantities 8 spoons : 4 chillies : 2 spoons : 1 spoon. A batch uses 16 spoons of coriander seeds and keeps every proportion unchanged.

(i) Find the number of red chillies.

(ii) Find the number of spoons of toor dal.

(iii) Find the number of spoons of fenugreek.