

Mathematics
Practice Test Paper 9
(Ganita Prakash Part 2 | Chapter 6: Algebra Play)
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. A number trick ends with $6x + 18 - 2(3x + 4)$. Its final result is:

- (A) $4x + 10$ (B) 8
(C) 10 (D) 18

2. A three-row pyramid has bottom row 2, 5, 8. Which bottom entry contributes twice to the top?

- (A) 8 (B) 5
(C) 2 (D) All three

3. The fraction uses all the numbers on the cards. What is its value?

$$\frac{\boxed{1} + \boxed{3} + \boxed{5}}{\boxed{7} + \boxed{9} + \boxed{11}}$$

- (A) $\frac{1}{4}$ (B) $\frac{1}{2}$
(C) $\frac{1}{3}$ (D) 3

4. A two-digit number exceeds its reversal by 27. Which digit is greater, and by how much?

- (A) Ones digit, by 9 (B) Ones digit, by 3
(C) Tens digit, by 3 (D) Tens digit, by 27

5. In the code $100M + D$, why are two places reserved for the day?

(A) Months have 100 days

(B) Month numbers have one digit only

(C) A day number can have two digits

(D) The year is removed

SECTION B

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

6. The top entry of a two-row pyramid is 17. Its two bottom entries are positive whole numbers, with the left entry 3 more than the right. Find them.

7. A six-digit repeated number gives quotient 286 after division by 7, 11 and 13. Find the original six-digit number without long multiplication.

8. A 2×2 calendar block is moved one column to the right, staying within the same two weeks. By how much does each diagonal sum change? Explain.

9. Two friends have 42 stickers altogether. After the one with more stickers gives 5 to the other, their amounts are equal. Find the original amounts.

SECTION C

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

10. A report lists 24 horses and hens with 69 legs. Explain why this is impossible. If the leg count is corrected to 68, find both animal counts.

11. A trick gives $100M + 20k + D$ after a month M , day D and fixed number k are used. Choose k so that the amount to subtract is 140. Then decode the result 456.

12. Compare the two pyramid tops without filling every box. Explain which is greater and why.



SECTION D

(Application Based Question - 3 marks)

13. A five-row pyramid has bottom row 1, 2, 3, 5, 8. Each entry is the sum of the two below it.

(i) Write the next row of four entries.

(ii) Write the two rows above it and then the top.

(iii) Identify the top's position in the sequence 1, 2, 3, 5, 8, ... and describe the pattern in the row starts.