



INDIAN SCHOOL SALALAH
FIRST TERM EXAMINATION – SEPTEMBER 2025



Class: VIII

MATHEMATICS (041)

Date: 29/09/2025

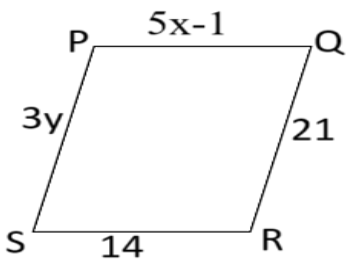
Time: 3 hours

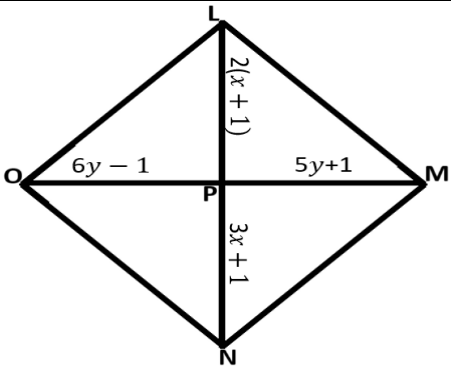
Maximum Marks: 80

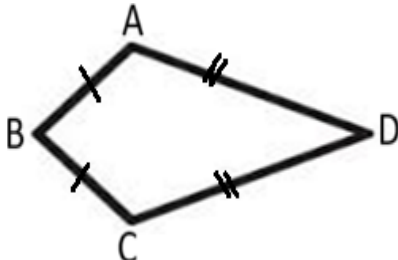
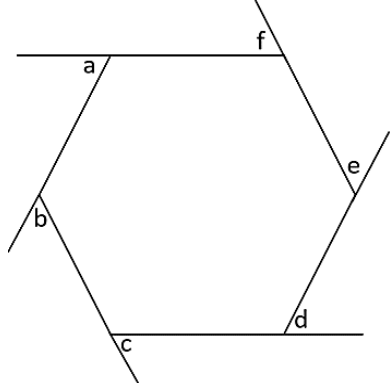
General Instructions:

- a) All questions are compulsory.
- b) This question paper consists of 30 questions divided into 5 sections.
- c) Section A contains 6 questions of 1 mark each. Section B contains 6 questions of 2 marks each. Section C contains 10 questions of 3 marks each. Section D contains 7 questions of 4 marks each and section E contains one case study question of 4 marks.
- d) Internal choices have been provided in Section C and Section D. You have to attempt only one of the choices in such questions.

NO	SECTION A	MARKS
1	Which of the following property of rational numbers is shown below? $\left(\frac{3}{4} \times \frac{-5}{6}\right) \times \frac{4}{5} = \frac{3}{4} \times \left(\frac{-5}{6} \times \frac{4}{5}\right)$ a) Closure property b) Commutative property c) Associative property d) Multiplicative identity	1
2	What is the length of the side of a square whose area is 441 cm^2 ? a) 22 cm b) 20 cm c) 21 cm d) 11cm	1
3	Solve the equation $7x + 14 = 21$ to find the value of x . a) $x = 5$ b) $x = 1$ c) $x = 7$ d) $x = 3$	1
4	Name the quadrilateral which has two pairs of equal adjacent sides but unequal opposite sides. a) Parallelogram b) Rhombus c) Kite d) Square	1
5	The ratio of 2:5 to percentage is ----- a) 50 % b) 20 % c) 10 % d) 40 %	1

	Q.6 contains two statements, ASSERTION and REASON, and has following four choices. Only one of them is the correct answer.	
6	Assertion (A): 9 is not a cube number. Reason (R): There is no natural number which multiplied by itself three times gives 9. a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A). b) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A). c) Assertion (A) is true but reason (R) is false. d) Assertion (A) is false but reason (R) is true.	1
	SECTION B	
7	If the area of a square field is 38.44 sq.m then find the side of the field.	2
8	a) Write the additive inverse of $-\frac{7}{13}$. b) Write the multiplicative inverse of $\frac{2}{5}$.	2
9	Solve for x : $9y - 5 = 4(y - 1) + 9$	2
10	Write a Pythagorean triplet whose one member is 24.	2
11	The price of an air cooler is ₹12,000. The sales tax charged on it is at the rate of 8 %. Find the amount Visagh will have to pay if he buys it.	2
12	The given figure PQRS is a parallelogram. Find x and y. 	2
	SECTION C	
13	What is the least number that should be added to 1436 to get a perfect square? Also find the square root of the perfect square.	3
14	Answer the following: a) If $1^3 = 1$, what will be $(0.1)^3$? b) What will be the digit in the one's place of 18^3 ? c) Cubes of all odd natural numbers are odd. Give an example.	3

15	An item marked at ₹ 960 is sold for ₹ 840. Find the discount and discount percentage.	3
16	Find the value of x and y in the following figure, where LMNO is a rhombus. State the property used to find them.	3
		
17	Simplify using suitable property: $\left(\frac{1}{7}\right) \times \left(\frac{2}{3}\right) + \left(\frac{1}{7}\right) \times \left(\frac{4}{15}\right)$	3
18	Solve the equation for x : $\frac{3x-4}{2x-1} = \frac{2}{3}$ OR Solve the equation for x : $3(2x - 5) + 4(x - 1) = 5(x - 3) + 6$	3
19	Find the square root of 7056 by division method.	3
20	By which smallest number, 35721 must be divided so that the quotient is a perfect cube?	3
21	Verify the associativity of multiplication for rational numbers, that is for any rational numbers a , b and c , $a \times (b \times c) = (a \times b) \times c$ by using the values, $a = \frac{1}{3}$, $b = \frac{-5}{6}$, $c = \frac{1}{2}$.	3
22	Answer the following: a) What is a regular polygon? Name a regular polygon of 5 sides. b) How many sides does a regular polygon have if the measure of an exterior angle is 36° ? c) What is the minimum interior angle possible for a regular polygon? Why?	3
SECTION D		
23	Is 2352 a perfect square? Justify your answer. Find the smallest number to be multiplied to make it a perfect square. Find the square root of the new number.	4
24	Find the amount and the compound interest on ₹48,000 for 3 years at the rate of 5% per annum, when the interest is compounded annually. OR	4

	If an LED TV is bought for ₹43,200 and this price includes 8% VAT, what was the original price of the TV before VAT was added?	
25	Solve the linear equations and find the value of x: a) $\frac{2x+5}{3} = 11$ b) $\frac{9x+1}{4} - \frac{x-3}{6} = 2$	4
26	Observe the given figure carefully and answer the following questions: The figure shows a quadrilateral ABCD. Sides are marked with identical lines to indicate equal lengths.  a) What is this quadrilateral called? b) Are all its sides equal? If not, write the pairs of equal sides. c) Are both diagonals equal and do they bisect each other? d) Name the angles which are equal in measure.	4
27	Name the property of rational numbers used in the following: a) For any two rational numbers a and b, $a + b$ is also a rational number. b) $\frac{2}{3} + \frac{3}{4} = \frac{3}{4} + \frac{2}{3}$ c) $\frac{-2}{7} + 0 = 0 + \frac{-2}{7} = \frac{-2}{7}$ d) $\frac{-9}{13} \times \frac{13}{-9} = 1$	4
28	Consider the given regular hexagon and answer the following questions: a) What is the sum of the measures of its exterior angles a, b, c, d, e, f? b) What is the measure of each? i) Exterior angle ii) Interior angle c) What is the sum of an interior angle and an exterior angle? d) Is a rectangle, a regular polygon? Why? 	4

29	a) A total of 3364 plants are to be planted in a garden such that the number of rows is equal to the number of plants in each row. Find the number of rows and the number of plants in each row. b) Express 23^2 as the sum of two consecutive integers.	4
	SECTION E Case-study based question: Read the following passage and answer the questions given below:	
30	Smartwatches are now extremely versatile and powerful tools, representing a major innovation in the wearable industry. They perform many functions, with the most common being tracking exercise and counting steps. This has a major impact on health. Gadha noticed the number of steps she walked on her smart watch in the evening and found it to be 10,976. Based on the above information, answer the following questions. a) Is the given number a perfect cube? Give reason. b) If not, then what is the smallest number to be multiplied to make it a perfect cube? c) What is the cube root of the resulting number? 	2 1 1
