



INDIAN SCHOOL BOUSER

(Affiliated to the Central Board of Secondary Education, New Delhi)
(Affiliation No: 6630203 and School No: 90252)
P.O. Box: 2886, Postal Code: 130, Al Awabi, Al Ansab, Sultanate of Oman



ACADEMIC YEAR 2026 - 2027

MID-TERM EXAMINATION – SET A

Subject: Mathematics	Grade: VII	Section:
Date of the test: 15.09.2026	Time: 3 hour	Maximum Marks: 80
Name of the Student:		

Instructions:

- All questions are to be attempted.
- The question paper contains 45 questions in 6 pages. Check if all the questions are printed.
- Write legibly and avoid using the correction pen (whiteners).
- Draw diagrams wherever needed.

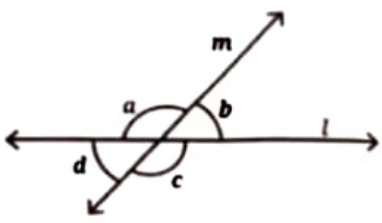
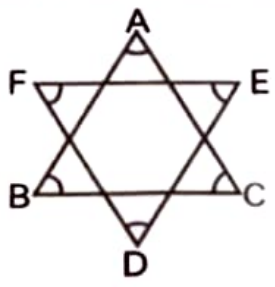
SECTION – A		
Choose the correct answer from the given options. (20 × 1 = 20 Marks)		
S.NO	Questions	Marks
1.	How many terms are there in the expression $28 - 12 + 7 \times 8$? (a) 2 (b) 5 (c) 3 (d) 4	1
2.	Assertion(A): $19 - (50 - 80) = 19 - 50 - 80$ Reason(R): When a bracket preceded by a minus sign is removed, the signs of all terms inside the bracket change. (a) Both A and R are true and R is the correct explanation of A. (b) Both A and R are true but R is not the correct explanation of A. (c) A is true but R is false. (d) A is false but R is true.	1
3.	Which expression represents "80 added to the product of 13 and 3"? (a) $(80 + 13) \times 3$ (b) $80 + (13 \times 3)$ (c) $(80 \times 13) + 3$ (d) $3 \times (80 + 13)$	1
4.	If the side length of a regular pentagon is p, and the side length of a square is q, which of the following expressions represents the total perimeter of the two figures? (a) $5p + q$ (b) $5p + 4q$ (c) $p + q + 9$ (d) $5p + 4$	1
5.	If $x = -1$, then the value of $-(90 - x)$ is _____ (a) 89 (b) -91 (c) 91 (d) -89	1
6.	Sai earns ₹k per month and saves ₹l per month. His monthly expenditure (in ₹) is _____ (a) $k + l$ (b) $k \div l$ (c) $k - l$ (d) $k \times l$	1

19.	Assertion(A): $\frac{5}{9} > \frac{5}{9} \times \frac{1}{8}$ and $\frac{1}{8} > \frac{5}{9} \times \frac{1}{8}$ Reason(R): The product of two proper fractions is always less than each fractions. (a) Both A and R are true and R is the correct explanation of A. (b) Both A and R are true but R is not the correct explanation of A. (c) A is true but R is false. (d) A is false but R is true.	1
20.	A juice seller fills $\frac{3}{5}$ litre of juice in one bottle. How much juice is there in $\frac{5}{6}$ of a bottle? (a) $\frac{2}{5}$ (b) $\frac{8}{11}$ (c) $\frac{5}{6}$ (d) $\frac{1}{2}$	1

SECTION – B

(17 x 2 = 34 Marks)

21.	Sana buys 5 boxes of erasers for her students. Each box costs ₹30. She also buys a pen for ₹85. Write the expression for the total purchase done. Find the total amount spent.	2																																																
22.	Insert the brackets in one possible way to make each statement true.(Do not change the order of the numbers or sign) (a) $-15 + 5 - 10 = -20$ (b) $48 \div 4 - 2 \times 3 = 6$	2																																																
23.	Write a story/situation for the expression $(80 \times 20) - 1200$	2																																																
24.	Fill in the blanks: (a) $(8 + 7) \times 12 = 8 \times \underline{\hspace{1cm}} + 7 \times 12$ (b) $16 \times 4 - 9 \times 4 = (\underline{\hspace{1cm}} + \underline{\hspace{1cm}}) \times 4$ (c) $99 + \underline{\hspace{1cm}} = 100 + 99$	2																																																
25.	Write the algebraic expressions for the following statements: (a) Difference of p and q divided by 3 (b) Two times the sum of x and y	2																																																
26.	A school has 4 rolls of wire, each measuring 12 m. The school buys another roll of wire of some unknown length to complete a fencing project. Give the expression for the total length of wire. Use the letter-number 'y' to denote the length in meters of the additional roll.	2																																																
27.	In a calendar month, a 2×3 grid full of dates is chosen as shown in the picture, expression for the dates in the blank cells if the bottom middle cell has date 'w'. Complete the grid in terms of 'w' November 2024 <table><tr><td>Mon</td><td>Tue</td><td>Wed</td><td>Thu</td><td>Fri</td><td>Sat</td><td>Sun</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td>1</td><td>2</td></tr><tr><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr><tr><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr><tr><td>17</td><td>18</td><td>19</td><td>20</td><td>21</td><td>22</td><td>23</td></tr><tr><td>24</td><td>25</td><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr></table> <table><tr><td></td><td></td><td></td></tr><tr><td>w-1</td><td>w</td><td></td></tr></table>	Mon	Tue	Wed	Thu	Fri	Sat	Sun						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				w-1	w		2
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28.	Two interior angles on the same side of the transversal measure $(x - 8)^\circ$ and $(5x - 4)^\circ$. Determine the measure of each angle.	2
29.	In the figure given below, find the values of $\angle a, \angle b, \angle c, \angle d$. Mention the property used.	2
		
30.	In the figure given below, if $\angle a = 115^\circ$, find $\angle b, \angle c$ and $\angle d$.	2
		
31.	Draw a 3×3 grid and write the result obtained by doubling every term in the generalized form of magic square.	2
32.	Two consecutive numbers in the Virahāṅka sequence are 987 and 1597. What are the next two numbers in the sequence? What are the previous two numbers in the sequence?	2
33.	Determine any four integer values that the lengths of the third side of a triangle can have if the other two sides have lengths 4cm and 8cm.	2
34.	Calculate the value of $\angle A + \angle B + \angle C + \angle D + \angle E + \angle F$ in the figure given below:	2
		
35.	The duration of one lesson is $\frac{5}{6}$ of an hour. Determine the duration of six such lessons in hours and minutes.	2
36.	Vihaan saw the Moon setting on Tuesday at 9 pm. His father, who is an astronomer, told him that every day the Moon sets $\frac{5}{4}$ hours later than the previous day. How many hours after 9 pm will the Moon set on Friday?	2
37.	Swathi and three of her neighbours buy 7 litres of milk every week and share it equally among the 4 families. How much milk does each family get in a week? How much milk will one family get in 3 weeks?	2

SECTION - D

44. **Case Study: Picnic**

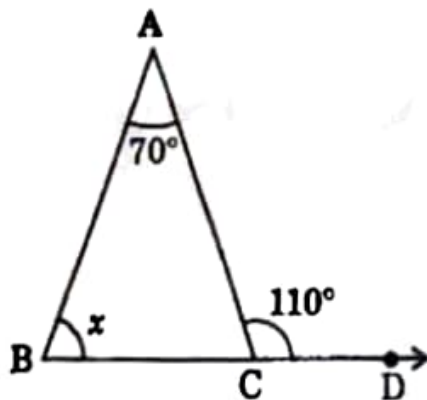
A school is organizing a picnic for students. The cost of transportation per student is ₹ t , and the entry fee per student is ₹ e . The school also charges a fixed booking fee of ₹200.



Based on the above information answer the following questions:

- Write an expression for the total cost for 6 students travelling and visiting the place.
- If the transportation cost per student is ₹800 and the entry fee is ₹500 per student, what will be the total cost for 5 students?

45. (a) Find the value of the unknown angle x using the exterior angle property.



- Construct a triangle ABC with $BC = 5\text{ cm}$, $AB = 6\text{ cm}$, $CA = 5\text{ cm}$. Construct an altitude from A to BC.

SECTION - C

(6 x 3 = 18 Marks)

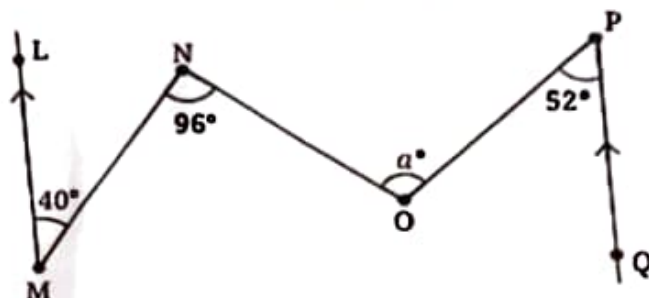
38. Solve the following:

(a) Find the value of the expression: $45 [38 - \{60 + 3 - (6 - 9 + 3)\}]$ (b) If the operation $*$ is defined as: $a * b = (a \times b) + (a + b)$, find the value of $12 * 3$.

3

39. What is the measure of angle $\angle NOP$ in the given figure? [Hint: Draw lines parallel to LM and PQ through points N and O]

3



40. Arrange and draw a height arrangement such that the sequence reads:

(a) 0, 1, 2, 3, 4, 5, 6

(b) 0, 1, 1, 2, 4, 1, 5

3

41. Higher Order Thinking Skills: Use the digits from 0 to 9 and solve the following cryptarithms:

3

(a) A B

+ B C

BC B

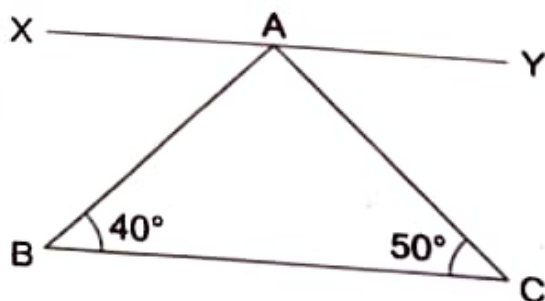
(b) E F

 $\times$ E

GGG

42. Find the third angle of a triangle using a parallel line when two of the angles are 40° and 50° .

3

43. Find the product of $\frac{2}{3} \times \frac{4}{5}$. Draw a unit square as a whole for representing the fractions and carry out the operations. Shade the fractions accordingly. Write the final answer.

3

7.	State whether the given statement is True or False: Thrice a number m decreased by 11 is written as $3(m - 11)$. (a) False (b) True	1
8.	One of the angles forming a linear pair is 74° , then the value of the other angle is _____ (a) 16° (b) 106° (c) 116° (d) 14°	1
9.	Opposite edges of a ruler are an example of _____ (a) transversal (b) vertex (c) parallel lines (d) intersecting lines	1
10.	Assertion(A): Two adjacent angles always form a linear pair. Reason(R): Two adjacent angles form a linear pair, if the sum is 180° (a) Both A and R are true and R is the correct explanation of A. (b) Both A and R are true but R is not the correct explanation of A. (c) A is true but R is false. (d) A is false but R is true.	1
11.	If we add j odd numbers, where j is odd, then the parity of the sum will always be _____ (a) Even (b) Odd (c) both odd and even (d) zero	1
12.	The expression for n^{th} odd number is _____ (a) $2 \times n$ (b) $2 + n$ (c) $2n - 1$ (d) $4 \times n$	1
13.	The number in the centre of a 3×3 magic square using digits 2 to 10 will be _____ (a) 6 (b) 4 (c) 5 (d) 3	1
14.	In a triangle ABC, $AB = 3\text{cm}$, $BC = 4\text{cm}$, then AC is equal to _____ (a) 9cm (b) 7cm (c) 8cm (d) 5cm	1
15.	How many altitudes can be drawn in a triangle? (a) 5 (b) 3 (c) 6 (d) 4	1
16.	In a right angled triangle, the sum of two acute angles is _____ (a) 180° (b) 100° (c) 90° (d) 45°	1
17.	What is the value of the product of the given fractions $\frac{3}{5} \times \frac{4}{7}$? (a) $\frac{12}{35}$ (b) $\frac{7}{12}$ (c) $\frac{3}{28}$ (d) $\frac{12}{21}$	1
18.	The reciprocal of $11\frac{2}{5}$ is _____ (a) $\frac{55}{5}$ (b) $\frac{57}{5}$ (c) $\frac{5}{57}$ (d) $\frac{5}{55}$	1