



B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL



POST MID-TERM (2025-26) MATHEMATICS

Class: VII

Date: 09.01.26

Admission no:

Time: 1 hr.

Max Marks: 25

Roll no:

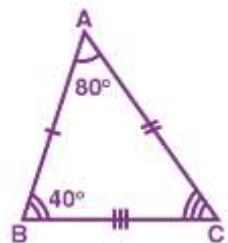
General Instructions:

- This question paper consists of five sections
- Section A consists of multiple-choice questions of 1 mark each. Section B consists of 2-mark questions and Section C consists of 3-mark questions.
- Attempt all questions. All answers must be correctly numbered as in the question paper and written in the answer sheet.
- Write neatly and draw diagrams wherever necessary.

A. Choose the correct answer:

1 x 5 = 5

- What is the value of (-1) raised to an even number?
a) -1 b) 1 c) 0 d) None of these
- If $2^3 \times 2^4 = 2^?$
a) 3 b) 4 c) 1 d) 7
- A/an _____ connect a vertex of a triangle to the mid-point of the opposite side.
a) Altitude b) median c) vertex d) none of these
- In the Pythagoras property, the triangle must be _____.
a) obtuse-angled b) acute-angled c) right-angled d) zero
- If two angles of a triangle are 80° and 40° , what is the measure of the third angle?
a) 60° b) 30° c) 40° d) 20°

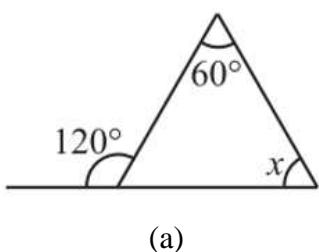


B. Do as directed

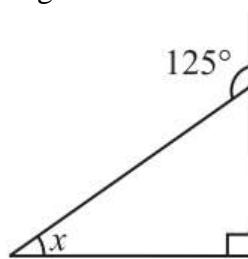
2 x 4 = 8

- a) Express 512 using the exponential notation
b) Find the value of $(4^0 + 4^1) \times 2^2$
- The numbers are given below. Express them in the standard form.
a) 1,28,64,00,000 b) 2,39,247

8. Find the value of the unknown interior angle x in the following figures.



(a)



(b)

9. Is there a triangle whose sides have lengths 10.2 cm, 5.8 cm and 4.5 cm?
Prove it.

C. Solve the following

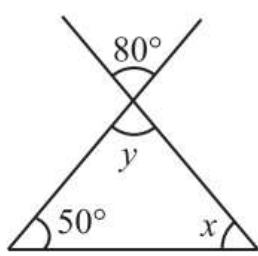
3 x 4 = 12

10. Simplify $[125 \times t^8] \div [5^2 \times 10 \times t^4]$

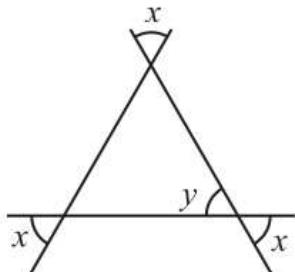
11. A tree is broken at a height of 5 m from the ground and its top touches the ground at a distance of 12 m from the base of the tree. Find the original height of the tree.

12. Find x so that $(5)^{x+1} \times (5)^5 = (5)^7$

13. Find the values of the unknowns x and y in the following diagrams



(a)



(b)