

**KAMSSA LOWER SECONDARY LEVEL ASSESSMENT
SENIOR TWO
BEGINNING OF TERM II 2024
MATHEMATICS
TIME: 2 HOURS AND 15 MINUTES**

INSTRUCTIONS

- Attempt **all** questions in this paper
- Neat work is a must
- All the necessary working must be shown clearly

Item 1

In a Jua kali factory, the number of pans produced in the first month is 250. The number of pans produced per month increases on the average by 30. Find the total number of pans produced for the first 12 months.

Item 2

Imran recorded the grades of his class received on a piece of home work in the table shown below

Grade	A	B	C	D
Frequency	6	5	10	3

Draw a pie chart to represent Imran's data

Item 3

Kutu withdrew some money from a bank. He spent $\frac{3}{8}$ of the money to pay for Mutua's school fees and $\frac{2}{5}$ to pay for Tatu's fees. If he remained with ksh 12,330, calculate the amount of money he paid for Tatu's school fees.

Item 4

An object with vertices A (2, 2), B (6,2) C (7,4) D (3,4) is reflected in the x- axis. Using a graph paper, plot points ABCD and determine the image points after reflection.

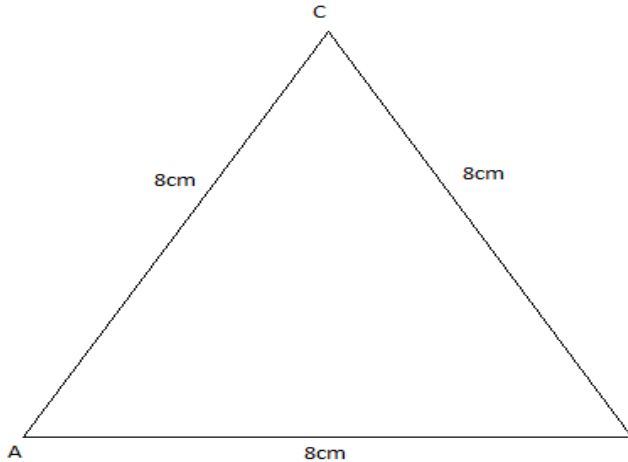
Item 5

Four electricity posts A, B, C and D stand on a level ground such that B is 21m on a bearing of 060° from A. C is 15m to the south of B and D is 12m on a bearing of 140° from A.

- (a) (i) Using a scale of 1cm to represent 3 meters, draw a diagram to show the relative positions of the posts
- (ii) Find the distances and the bearing of C from D.

Item 6

The figure below is drawn to scale; it represents a field in the shape of an equilateral of side 80m. it is drawn such that $1\text{cm} = 10\text{m}$



The owner wants to plant flowers in the field. The flowers must be in a circular form such that they just touch the sides AC, AB and BC.

Task: By using a pair of compasses, pencil and a ruler. Construct the field and inscribe a circle of flowers. Hence determine the area occupied by the flowers.

Item 7

The head teacher of your school wants to renovate all the seven classroom floors by covering them with tiles, but he lacks knowledge in cost estimation. Each classroom measures 8m by 7m while each tile measures 40cm by 38cm.

Task

Given that each box of tiles is a square meter and it costs UGX 22,000,

- a) Help your Head teacher to determine the number of boxes of tiles required for all the seven classrooms.
- b) Determine the cost of buying the boxes of tiles.

Item 8

Livingstone works with Mombasa quality furniture company as a salesman. In this company a table is sold Ksh4,500 and a chair Ksh2,000. Livingstone earns a commission of 8% on every table and 5% on every chair sold. In the first week of April 2024, he sold 3 more chairs than tables.

Task

If his total earnings were Ksh3,980, how many chairs did he sell in that week?

END