



ASK INTEGRATED TEACHER'S EXAMINATIONS BUREAU LTD

Uganda Lower Secondary Certificate of Education

END OF YEAR ASSESSMENT 2024

MATHEMATICS PAPER 1

SENIOR ONE

(Theory)

2 Hours

INSTRUCTIONS TO CANDIDATES:

Attempt all items in this paper.

All questions carry equal marks (20 marks each)

Be neat and organized

Item 1

In Hoima city there are various secondary schools with different populations. One of the schools is SPAH with a population of 720 students. It's a mixed school with both girls and boys, with a boarding and a day section.

If 20% of the students at St Patrick's high school are male.

Task:

- (a) What is the percentage of females in the school?
- (b) How many more females than males are in the school?
- (c) If 25% of the female students are day scholars, how many female students are in boarding?
- (d) If all male students are in boarding and 3 students share a decker, how many deckers are needed to accommodate all the male students?

Item 2

In a certain school, the bells for changing lessons for O' level rings after 40 minutes while that for A' level rings after an hour. Lessons for both O' and A' level begin at 07:20 am with the sounding of the bells.

If the school chef buys 30 heaps of tomatoes, each with 8 tomatoes from a farmer;

Task

- a) At what time did the school bells ring again together again?
- b) What is the number of tomatoes in base eight that the chef bought?
- c) By converting the number of tomatoes back to base ten, how much will the farmer earn by selling each tomato at Ugx 200?

Item 3

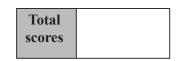
Two learners were given a task of plotting the following points on the grid. A (0, 4) B (2, 2), C (4, 2), D (2, 0), E (4, -2), F (0, -1), G (-4, -2), H (-2, 0), I (-4, 2) and J (-2, 2). Before they plotted the points, Jane told Musa that when plotting, for point A you move 4 units to the right of the origin and no movement along the y-axis from the origin. For point C you move 2 units to the right of the origin and 4 units parallel to the y-axis in the positive direction. Musa said no for point A there is no movement along the x-axis, you only move 4 units along the y-axis. While for point C you move 4 units from the origin on the x-axis, then two units parallel to the y-axis.

Task

- (a) Comment with reasons on Jane's explanation of plotting the points.
- (b) Using Musa's explanation, plot the coordinates.
- (c) Join the points to form a polygon. State the equation of the line of symmetry.

END





Scorer's initials:

AITEL END OF YEAR ASSESSMENTS Uganda Certificate of Education

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DO NOT WRITE YOUR SCHOOL/ CENTRE NAME OR NUMBER ANYWHERE IN THIS BOOKLET Candidate's Name..... Random No Signature.... **Personal Number** Subject......Paper Code...../..... FOR SCORERS USE ONLY Item _____ Basis code Score Scorer's initials: Item Basis code Score

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