

456/1
MATHEMATICS
Paper 1
April/May,2026
 $1\frac{3}{4}$ hours



KAGADI JOINT MOCK EXAMINATIONS CONSULT
END OF TERM ONE EXAMINATIONS,2026
S.2 MATHEMATICS
Paper 1
1 hour 45minutes

INSTRUCTIONS:

*This paper consists of two sections; A and B. It has **four** examination items.*

*Section A has **two compulsory** items.*

*Respond to **one** examination item from section B.*

*Respond to **three** examination items in **all**.*

***All** responses must be written in the answer sheets provided. Therefore, **no** extra sheet of paper shall be given for rough work.*

*Any additional item responded to shall **not** be scored.*

SECTION A

*Respond to **both** items in this section.*

Item 1

A couple wants to celebrate their anniversary. The wife promises to buy items worth 1.5 million and the husband promises to buy items that will cost an amount that is two-quarters more than that of the wife. The son promises to buy all the drinks on the budget which were: 3 cartons of soda each containing 24 bottles and 6 cartons of water each containing 6 bottles.

To reach the venue, the couple planned to move 20km east from their home and then 30km north. However, the son plans to take the direct route from the parents' home to the venue.

The total amount on the budget for the anniversary was two million three hundred forty–six thousand.

Task

(a) How;

- (i) much will the husband contribute?
- (ii) much will the son contribute for soda and water?
- (iii) many guests would you advise the couple to invite and why?

(b) What distance will the son travel?

Item 2

Mr Apeku Erias is an agent for three companies of Soda: Coca cola, Pepsi and Riham beverages. He has highlighted the following places on the map of Africa where he intends to market these companies' products using his Tick tok account. These places include: South Africa, Burundi, Kampala, Dodoma, Accra, Bujumbura, Nairobi, Ghana, Johannesburg, Tanzania, Uganda, Kenya, Cairo, Kigali, Egypt and Rwanda.

He earns a commission on every carton of soda sold. He sells each carton of Coca cola, Pepsi and Riham at Shs 11000, Shs 10500 and Shs 10000, respectively. On a good day, he sells 30 cartons of Coca cola, 20 cartons of Pepsi and 10 cartons of Riham.

Task

- (a) Help Mr Apeku to sort the places using an arrow diagram.
- (b) List the places in the;
 - (i) domain.
 - (ii) range.
- (c) What is the relationship between the domain and range in (b) above.
- (d) Describe the type of relation in the arrow diagram in (a) above.
- (e) How much commission did Apeku earn on a good day for all the sales?

SECTION B

Respond to one item from this section.

Item 3

A school registered candidates for UCE 2025 for the first time. The candidates' performance was as shown in the table below:

Grade	A	B	C	D	E
No. of Candidates	02	05	04	01	03

A candidate was considered to have passed if he/she scored grade A– D.

The head teacher wishes to present a candidates' performance report to the parents in a parents meeting slated for next week. The report should include;

- (i) Total number of candidates who sat for the examination.
- (ii) Percentage pass
- (iii) Percentage fail
- (iv) A pie – chart displaying the candidates' performance for easy interpretation.

Additionally, if the percentage of candidates who failed is more than 10%, the school will introduce extra lessons next term as a strategy to improve candidates' performance.

Task

Help the head teacher to prepare the report.

Item 4

Julie intended to walk 200m on a bearing of 240° . Her compass direction was faulty, so she actually walked 200m on a bearing of 225° .

Task

Help Julie to determine the distance and bearing she should consider to get to the place she intended to reach.