

END OF YEAR EXAMINATIONS

Uganda Certificate of Lower Secondary Education

Mathematics Paper S.2

TIME : 2 hours

STUDENT'S NAME: _____ STREAM.....

INSTRUCTIONS:

- Answer all the questions in section A and Each question in section A carries 4 marks

Section A (40 MARKS)

1. ELon Musk, this month of October 2022 paid 44 billion dollars to purchase twitter. If he got 45% of the money from selling his assets and rest from a bank loan. What is the value of money he got from selling his assets and Bank in figures?

Sell of his assets	Bank

2. In a Geography lesson, Alex learnt about the following places; Mount Longonot, Mount Elgon, Mount Meru, Mount Kilimanjaro, Mount Rwenzori, Kenya, Tanzania and Uganda.
(a) Draw an arrow diagram to show the relation amongst the places listed.
(b) What is the domain and the range from your relation?

.....

.....

.....

.....

3. Given that the inflation rate according to bank of Uganda increased by 6.8%, implying that the price of commodities have increased by that mentioned rate?
If the price of posho is now 4500/= what is the original price of the commodity?

.....

.....

.....

.....

4. A Farmer said he annually spends at least 8000 per acre on spraying, weeding 24,000 per acre and shs 20,000 on pruning per acre. What is the spending on a farm of 20 acres?

.....

.....

.....

.....

5. The sum of two numbers is 27. If one of the numbers is twice the other. Find the numbers.

.....

.....

.....

.....

6. Using a relation that $3x - 2$, what is the domain if the range is $\{4,10,16,22\}$

.....

.....

.....

.....

7. Mariam and Peter take 30 and 40 minutes respectively to run round a circular track. If they started their race at 8:00 am from the same starting point;

- (a) What is the earliest time they will be at the starting point together?
(b) After how many hours will they be at the starting point together?
-
-
-
-
-

8. (a) At the market, Marion had 80,000. He spent $\frac{1}{4}$ of his money on books and $\frac{4}{5}$ of the remainder on open shoes. How much money did she remain with after her spending with transport of 5000?

.....

.....

.....

.....

9. A translation described by vector \mathbf{T} transforms a point A (3, -2) to A' (5, 2).

(a) What is the vector translation \mathbf{T} ?

(b) Use the translation obtained in (a) to work out the coordinates of the image of point B (2, 4).

.....

.....

.....

.....

10. A promo costs sh 50,000 for equipments and 10,000 per person's costume. If an MTN promo has 20 people participating in it. Form an equation and use it to find the overall cost of the promo?
-
-
-
-

Section B (40 Marks)

(Number 11 is **COMPULSORY** and Pick any **ONE** from 12 and 13)

11. A learner is given a task of plotting the following points on the grid. A(-4, 1), B (-6, -2), and C (-2, 4)

- Plot the coordinates above.
- Draw a line $y = -x$ and reflect the figure through that line.
- Then translate image of part (b) above using a translation vector $\begin{pmatrix} 2 \\ -2 \end{pmatrix}$.
- State the co-ordinates of the final image. (10 marks)

12. Below is table showing the price of petrol for the months of January to July in Uganda.

Month	Jan	Feb.	Mar	Apr	May	Jun	July
Price(UGX00)	29	32	45	50	54	65	60

- Draw a line graph to represent the information above
 - Suggest a price for August following the trend of the line graph with reason
 - If a school has trips in months of Feb, May and June. Covering distances of 12Km, 20km and 10 km respectively. If A school Bus consumes(uses) one litre for every 2km. what will be the total cost price of petrol to be used in the School Bus? (20 marks)
13. The caterer of a school located in kira Municipality is required to buy food stuffs for a school party. The foodstuffs to be bought include: 100 kg of rice, 150kg of meat and 200kg of Irish potatoes. The cost is UGX 4000, UGX18,000, and UGX1500 per kg of rice, meat and Irish potatoes respectively in kyaliwajara market. The same items cost UGX. 2500, UGX. 14,000 and UGX. 1,200 per kg of rice, meat and Irish potatoes respectively, in

Gayaza market. To hire a pick-up from Kyaliwajara market to school costs UGX 50,000 while a pick-up hire from Gayaza farmers' market is UGX100,000.

- (a) Using the information provided above, how would the caterer decide on where to do the shopping from? Justify your answer. **(20 Marks)**

END