THE REPUBLIC OF UGANDA

KAMULI DISTRICT MOCK EXAMINATION

PRIMARY LEAVING EXAMINATION MOCK

2024

MATHEMATICS

Time Allowed: 2 Hours 30 Minutes

EMIS No.						Personal No.		

Candidate's Name: .....

Signature: .....

School: .....

Read the following instructions carefully:

1. This paper has two **sections A** and **B**. Section **A** has **20** questions and section **B** has **12** questions. This paper has **8** printed pages.
2. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
3. **All** working must be done using a blue or black ball point pen or ink. Any work written pencil other than graphs, pictures and diagrams will not be marked.
4. **No calculators** are allowed in the examination room.
5. Unnecessary changes of work will lead to **loss of marks.**
6. Any handwriting that cannot easily be read may lead to **loss of marks**.
7. Do not fill anything in the boxes indicated: **"For Examiners' Use Only"**.

For Examiners' Use Only		
Qn. No.	**Marks**	**EXR'S NO.**
Page 2		
Page 3		
Page 4		
Page 5		
Page 6		
Page 7		
Page 8		
TOTAL		

SECTION A: 40 MARKS

1. Add 178 + 821

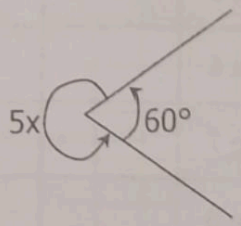
2. Given that A = {a, b, c, d, e, f} and B = {a, e, i, o, u}, find n(AUB)

3. Write in figures "two million, two hundred forty-six thousand, three hundred eighty-four"

4. Work out: $\frac{5}{6} - \frac{3}{4}$

5. Work out: $^{-}8 - {}^{-}3$

6. Find the value of x in the figure.



7. Write the next two numbers in the sequence: 2, 3, 5, 7, ..., ...

8. Simplify: $3e - 6g + 5e - 5g$

9. Write 68,045 in scientific notation.

10. The volume of a rectangular prism is 120 cm^3. If it is 5 cm long and 6 cm high, what is its breadth?

11. The ratio of boys to girls in a class of 80 pupils is 5:3. Find the number of boys in the class.

12. Solve the equation: $5x - (2 + 3x) = 0$

13. The price of an article was reduced by 30% to sh. 98,000. What was the price of the article before the reduction?

14. Prime factorise 24 and give the answer in power form.

15. A car uses 6 litres of petrol to cover 30 km. How far does the car go with 11 litres of petrol?

16. Abdul scored the following marks in a test: 70, 65, 60, 50, 60, 65, 60, 75, and 80. Work out the median mark.

17. Using a very sharp pencil, a ruler and a pair of compasses only, construct an angle of 105°

18. Express 6.85 metric tonnes in kilogrammes.

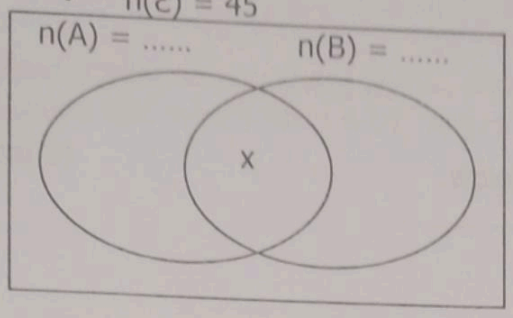
19. A seminar began at 10:30 am and ran up to 1:30 pm. How long did the seminar last?

20. Calculate the simple interest on sh. 800,000 for 2 years at 10% per annum.

SECTION B: 60 MARKS

21. Given that n(A) = 30, n(B) = 25 and n(A∪B) = 45

• n(Ɛ) = 45



(a) Complete the venn diagram. (2 marks)

(b) Find:

(i) n(A∩B) (1 mark)

(ii) n(A – B) (1 mark)

(iii) n(B – A) (1 mark)

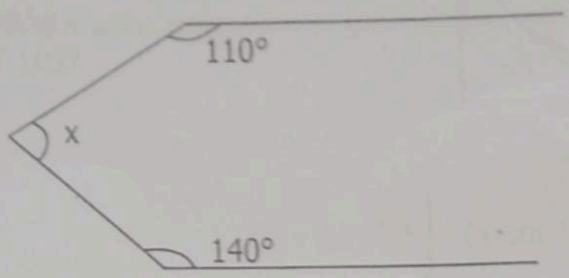
22. (a) Use the digits 4, 5, 6 and form possible three-digit numerals. (3 marks)

(b) Find the sum of the largest and smallest number formed. (2 marks)

23. (a) Express 0.272727 ... as a common fraction. (2 marks)

(b) Work out $\frac{2.6 \times 3.5}{0.4 \times 0.7}$ (2 marks)

24. (a) Find the value of x in the figure below. (2 marks)



(b) 3x and 2x are supplementary angles. Find the value of x and the sizes of the angles. (4 marks)

25. (a) A father is four times as old as his son. If their total age is 65 years, how old is the father? (2 marks)

(b) Solve and write the solution set for the inequality $3(a - 1) - 5(a - 1) \geq 4$ (3 marks)

26. The table below shows how the pupils scored in the end of term examinations.

Marks scored	20	30	50	60	70	80
No. of Pupils	3	1	2	1	2	2

(a) How many pupils did the test? (1 mark)

(b) What was the mean mark? (2 marks)

(c) What was the median mark? (2 marks)

27. (a) Using a ruler, a very sharp pencil, and a pair of compasses only, construct triangle ABC where AB = 8 cm, angel BAC = 90° and angle BCA = 60° (5 marks)

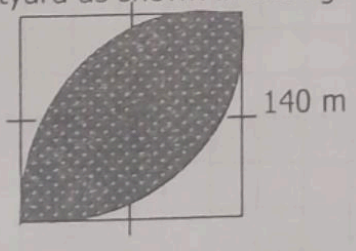
(b) Measure line **AC** (1 mark)

28. Angume, Bachu and Cheptegei shared a certain sum of money in the ratio of 2: 3: 5 respectively. If Cheptegei got sh. 150,000 more than Angume,

(a) how much money did each get? (4 marks)

(b) How much money did the share altogether? (2 marks)

29. A square courtyard was 14 metres by 14 metres. A flowerbed is shown at the courtyard as shown in the figure.



Find:

(a) the area of the courtyard. (2 marks)

(b) the area of the flowerbed. (Shaded part) (*Take* $\pi = \frac{22}{7}$) (5 marks)

30. A car manufactured in England was valued at 1,350 Pound Sterling in England. Transporting the car from England to Kampala, Uganda together with customs duty accounted for 50% of the factory price. What would be the total expenses on the car at Kampala? (*Given that 1 Pound Sterling = 4,300 Ugandan Shillings*) (4 marks)

31. A taxi driver drove at 60 km/h for 3 hours and drove back at 50 km/h for 2 hours. Calculate his average speed for the whole journey. (3 marks)

32. Plot the points P(-4, -2), Q(-4, 4) and R(3, -2) on the grid. Join **P** to **Q**, **Q** to **R** and **R** to **P** to form a geometric figure. (4 marks)