

**BULAMBULI DISTRICT LOCAL GOVERNMENT
PRIMARY LEAVING MOCK, 2024**

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Random No.						Personal No.		

Candidate's Name:

Candidate's Signature:

District ID No:

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Read the following instructions carefully:

1. Do not write your school or district name anywhere on this paper.
2. This paper has two sections: A and B. Section A has 20 questions and Section B has 12 questions. The paper has 8 printed pages altogether.
3. Answer all questions. All the working for both sections A and B must be shown in the spaces provided.
4. All working must be done using a blue or black ball point pen or ink. Any work done in pencil other than graphs and diagrams will not be marked.
5. No calculators are allowed in the examination room.
6. Unnecessary changes in your work and handwriting that cannot easily be read may lead to loss of marks.
7. Do not fill anything in the table indicated: "For Examiners' use only" and boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn. No.	Marks	EXR'S NO.
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

SECTION A : 40 MARKS.

Answer all questions in this section.

Questions 1 to 20 carry two marks each.

1. Work out:

$$\begin{array}{r} 737 \\ + 162 \\ \hline \end{array}$$

2. Given that set $K = \{v, w, x, y, z\}$
How many proper subsets are in set K ?

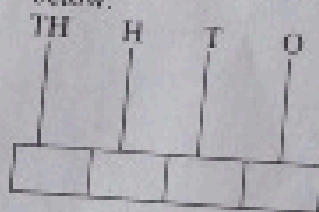
3. Round off 70.95 to the nearest tenths.

4. Given that $m = \frac{3}{4}$ and $p = 12$
Simplify: $3mp^2$

5. Find the next two numbers in the sequence below;
1, 2, 10, 37, _____

6. A bank charges interest at a rate of 10% per year. Sarah borrowed an emergency loan of Shs. 500,000 and repaid it after 9 months. How much money did she pay back?

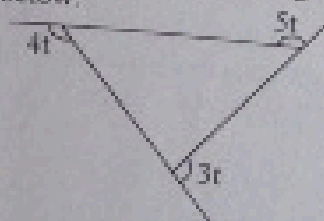
7. Tom used 3, 0, 4 and 1 digits to form 4-digit numerals. Show the smallest 4-digit numeral formed on the abacus below.



8. Work out: $111_{\text{ten}} \times 11_{\text{ten}}$

9. Convert $\frac{11}{20}$ kg to grams.

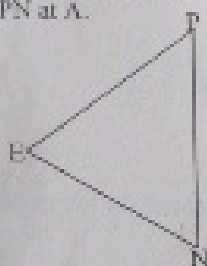
10. Find the value of t in degrees from the figure below.



11. Express a quarter past midnight to a 24-hour clock system.

12. Write 80.7×10^{-5} as a single numeral.

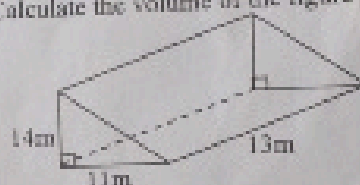
13. Using a ruler, a pencil and a pair of compasses only, construct a perpendicular bisector from angle PEN to meet line PN at A.



14. Work out the average of 20, $4p$, $p + 5$, $2p$ and $3p - 100$.

15. An egg vendor sells a tray of 30 eggs at Shs. 9500 per day. What amount of money will he earn in a fortnight?

16. Calculate the volume of the figure below.



17. Use distributive property to simplify;
 $\left(\frac{2}{3} \times 11\right) + \left(\frac{2}{3} \times 13\right)$

18. Solve the inequality.
 $2x + 3 < 15$

19. Use the dial below to work out the value of n ;
 $4 - 6 = n$ (finite 7)



20. A father and a daughter contributed Shs. 80,000 for a picnic party in the ratio 5 : 3 respectively. How much more did the father contribute than the daughter?

SECTION B : 60 MARKS

*Answer all questions in this section.
Marks for each question are indicated in the brackets.*

21. The exchange rates in Uganda Shillings at the City forex bureau are as below;

Currency	Buying Uganda
1 US dollar (\$)	Ug Shs. 3720
1 Kenya Shilling (K Sh.)	Ug Shs. 28

- (a) How much will Amos get in Uganda Shillings if he has 300 US dollars?
(2 marks)

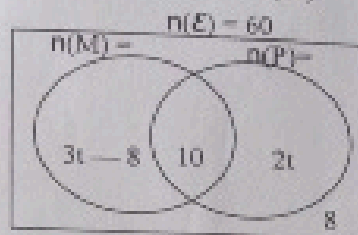
- (b) If Annet has 52080 Kenya Shillings, how many US dollars can she get from the forex bureau?
(3 marks)

22. (a) Solve for a : $3^{1a} + 3^a = 81$
(2 marks)

- (b) Write $(7 \times 10^2) + (4 \times 10^{-2}) + (4 \times 10^3)$ in short form.
(2 marks)

- (c) The sum of y , $y + 2$ and $y + 4$ consecutive odd numbers is 51. Find the value of y .
(2 marks)

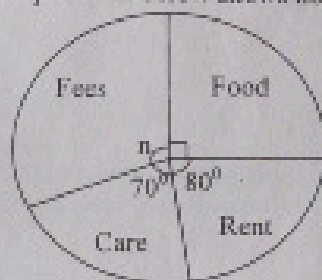
23. The Venn diagram below shows 60 candidates registered for Mock Examination who eat posho (P) and matooke (M).



- (a) Work out the value of t . (2 marks)

- (b) If a candidate is picked at random to pray, what is the probability that a candidate picked eats matooke? (2 marks)

24. The pie-chart below shows how a parent spends his income worth Shs. 360,000.



- (a) Solve for the value of n in degrees. (2 marks)

- (b) How much money does he spend on fees? (2 marks)

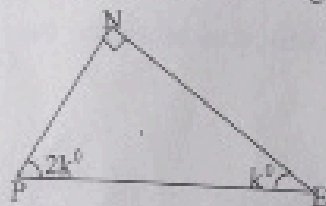
- (c) What percentage of his income does he spend on food? (1 mark)

25. (a) Arrange 0.5, 5.5 and 0.05 in ascending order. (2 marks)

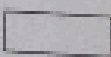
- (b) Convert 0.4545..... to common fraction in its simplest form. (2 marks)

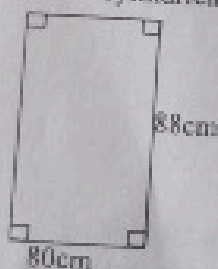
- (c) In a class of 180 candidates, $\frac{1}{4}$ of them are boys and the rest are girls. How many more girls than boys are in the class? (2 marks)

26. (a) Calculate the size of angle PEN in degrees. (2 marks)



- (b) Work out the interior angle sum of a regular polygon whose interior angle is 4 times its exterior angle. (4 marks)

27. The figure below shows a rectangular sheet of metal which is to be folded to form a hollow cylindrical tank. 



- (a) Work out the radius of the cylindrical tank formed. (2 marks)

- (b) Calculate the volume of the cylindrical tank formed. (2 marks)

28. With the help of a ruler, a sharp pencil and a pair of compasses only, construct a rhombus WXYZ such that its diagonals $XZ = 8\text{cm}$ and $WY = 6\text{cm}$. (4 marks)

29. Ruth constructed a circular kraal with the area of 616m^2 .

(a) Find the radius of the kraal. (2 marks)

(b) If Ruth fenced the kraal with poles planted 2 metres apart at a cost of Shs. 3000 per pole, how much did she spend? (2 marks)

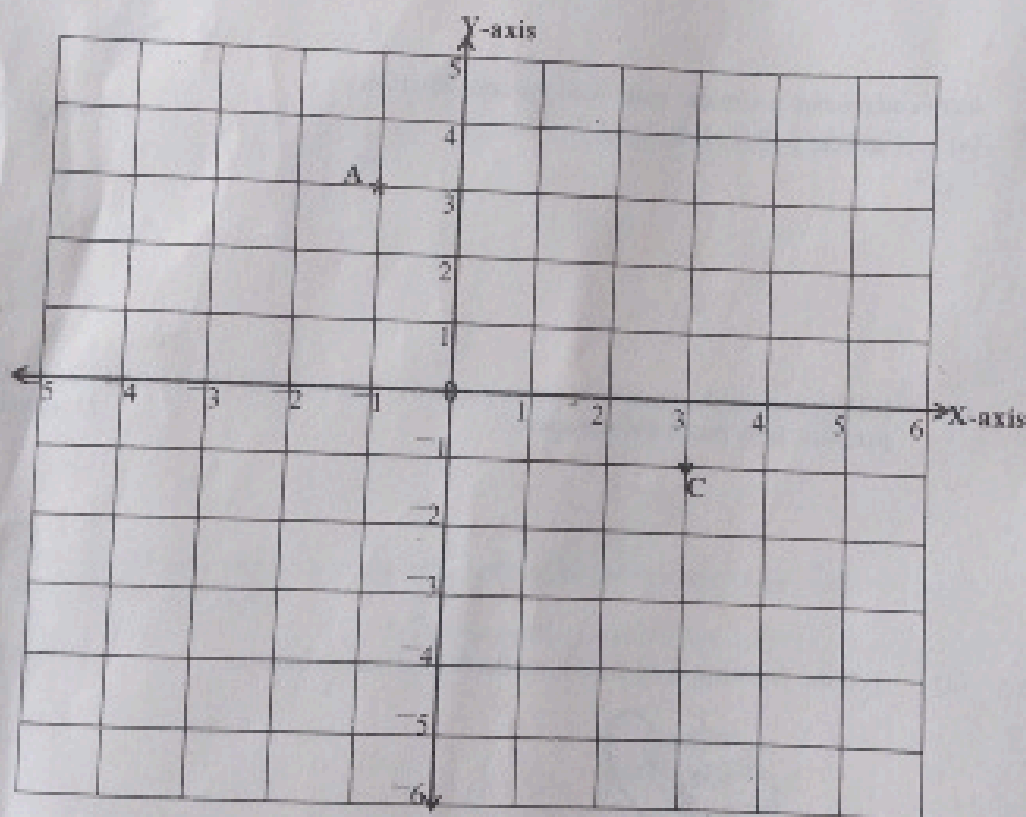
30. (a) Tell the morning time shown on the digital watch below. (1 mark)



- (b) A taxi travelled at 20km/hr for $1\frac{1}{2}$ hours before getting a flat tyre which took $\frac{1}{2}$ an hour to repair. He then covered the remaining 45km in an hour. Calculate the taxi's average speed for the whole journey. (4 marks)

31. (a) Simplify: $4x - r + x - 4r$ (2 marks)
- (b) Solve for m: $\frac{m}{11} + 12 = 2(m + 4)$ (2 marks)

32. (a) On the grid graph below, state the co-ordinates for points A and C. (1 mark)
- (i) A (1 mark)
- (ii) C (1 mark)



- (b) Plot the points B (3, 3) and D (-4, -4) (2 marks)
- (c) Join A to B, B to C, C to D, D to A and name the quadrilateral formed. (2 marks)



END