RUBANDA DISTRICT EDUCATION COMMITTEE
DEPARTMENT OF EDUCATION AND SPORTS
PRIMARY MOCK EXAMINATIONS **2023**

MATHEMATICS

Time Allowed: 2hours 30Minutes

Random No.						Personal No.		

Candidate's Name: .....

Candidate's Signature: .....

Name of School: .....

Read the following instructions carefully.

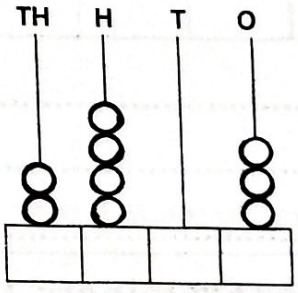
1. This paper has **two** Sections **A** and **B.**
2. Section **A** has **20** questions and section **B** has **12** questions.
3. Answer **all** questions. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** answers **must** be written using a **blue** or **black** ball point pen or ink. Any work written in a pencil will **not** be marked except diagrams
5. **No calculators** are allowed in the examination room.
6. Unnecessary **changes** in your work and hand writing that cannot be read easily may lead to **loss of marks.**
7. Do not fill anything in the table indicated: **"For examiner's Use only"** and boxes inside the question paper.

For Examiners' Use only		
Qn No.	Marks	Exrs' No
1-5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

SECTION A (40MRKS)

1. Work out: 6 x 3

2. Find the value of the digit in the place value of hundreds in the number shown on the abacus

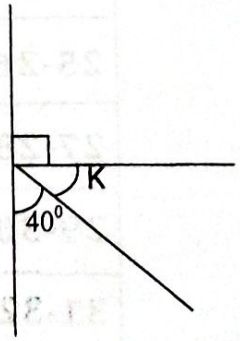


3. Set Y={k, l, m, n, o} and

   Set R={m, a, r, k}

   List members that are common to sets Y and R

4. Find the size of angle marked K in the figure below.



5. Find the next number in the sequence:

1, 5, 11, 19, 29, ___

6. Find the number whose expanded form is shown below.
4 + 600 + 7000

7. Write in figures. "Fourteen and eight hundredths"

8. **a = 4** and **b = 5**. Find the value of $a^2 + b^2$

9. A mathematics examination that took $2\frac{1}{2}$ hours started at 11:15am. At what time did it end?

10. Set N = {7, 8, 9}. List all proper subsets of set N

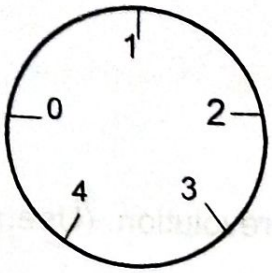
11. Work out $(100 \div 2) - (80 \div 2)$ using the distributive property

12. A stone weighs 250g. Find its weight in cg

13. Kato is k + 7 years old, Murungi is 2k years old while Muhindi is 3k- 4 years old. Find their mean age.

14. A litre of cooking oil costs sh.8000. Find the cost of 2500 cm^3 of cooking oil

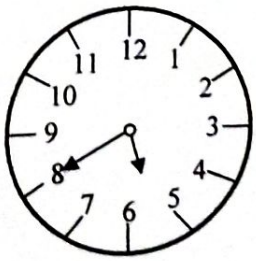
15. Use the dial method to work out $3 \cdot 4 = \_\_\_\_$ (mod 5)



16. Solve for n: $3n - 6 = n$

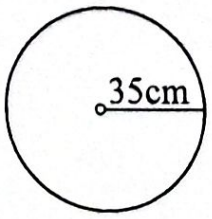
17. Use a pair of compasses and a ruler to construct an angle of 135^0

18. Write the morning time shown on the clock face below in 24 hour clock system



19. Find the number of years in which sh. 400,000 yields an interest of Sh.80,000 at a rate of 5% p.a

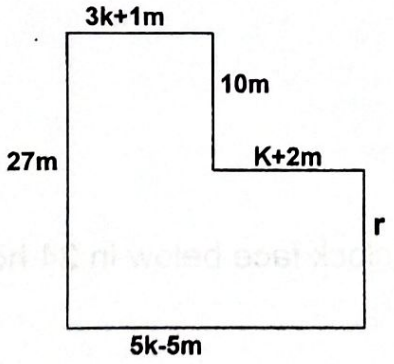
20. The figure below shows a bicycle wheel.



Find the number of cm it covers in one revolution. (Use $\pi = \frac{22}{7}$)

SECTION B (60 marks)

21. The figure below shows a piece of land.



(a) Find the value of r *(2marks)*

(b) Find the value of K *(03mrks)*

22. A bus left town A at 9:40 am moving at a speed of 80km/h and reached town B at 12:10 pm.

(a) How long did the bus' journey take? ***(2mrks)***

(b) Find the distance between the two towns ***(2mrks)***

23. The table below shows items bought by a man from a certain shop.

Item	Quantity	Unit cost	Amount
Bread	2 loaves	Sh _____per loaf	Sh. 11,000
Sugar	_____grams	Sh. 4000 per kg	Sh. 2,000
Tea leaves	¼ kg	Sh_____ per kg	Sh. 1500
Total			Sh. _____

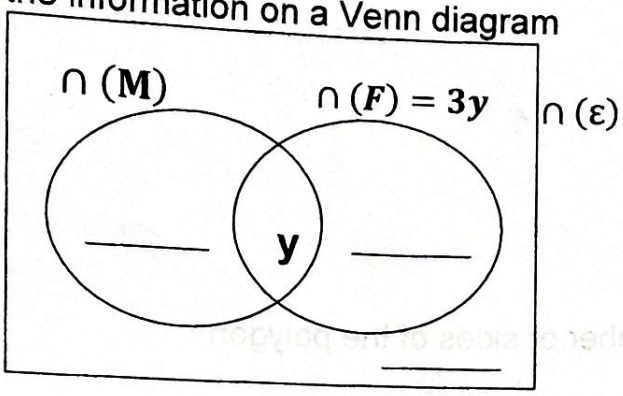
(a) Complete the table **(4mrks)**

(b) Find how much he would pay if he was allowed a discount of 10%
(2mrks)

24. Mark fuels his car after every 6 days while Luke fuels his after every 7 days. After how many weeks will the duo fuel their cars on the same day?
(4mrks)

25. In a group people, y+ 6 eat meat (M) only 3y eat fish (F), y eat both meat and fish while 4 eat neither meat nor fish

(a) Show the information on a Venn diagram ***(3mrks)***



(b) The number of those who do not eat meat is 14.
Find the value of y ***(2mrks)***

26. A man uses 10% of his monthly income for rent, $\frac{3}{10}$ for food, 0.4 for fees and the rest for others.

(a) Find the fraction of the income that he uses for others ***(3mrks)***

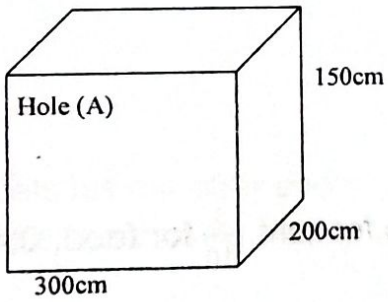
(b) Given that he uses sh. 200,000 for fees, find how much his monthly income is ***(2mrks)***

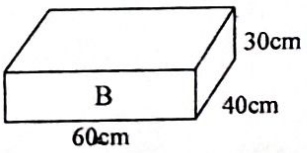
27. The exterior angle of a regular polygon is $\frac{2}{3}$ of the interior angle

(a) Find the exterior angle of the polygon *(3mrks)*

(b) Find the number of sides of the polygon *(2mrks)*

28. Below is a rectangular hole (A) and container (B)





(a) Find the volume of the hole *(2mrks)*

(b) Find the number of containers (B) full of soil that can be used to fill hole A *(4mrks)*

29. In a class, there are 60 pupils. 20 of them like volley ball, ¼ of them like football and the rest like basket ball. Represent this information on a pie chart. ***(5mrks)***

30. Alice is 25 years younger than Mary and 30 years younger than Sarah. 5 years ago, Sarah was 4 times as old as Alice. Find Alice's ago now ***(5mrks)***

31. John can build a house in 12 months, Mark can build the same house in 6 months while Mathew can build it in 4 months. If the three are employed to build the house, find the number of months they will take to build it. ***(4mrks)***

32. Town Q is 100km East of town K and town Z is 80km from town K on a bearing of 210^0

(a) Draw a sketch diagram showing the three towns *(1mrk)*

(b) Use a scale of 1cm: 20km to draw an accurate diagram for the three towns *(3mrks)*

(c) Find the shortest distance between towns Q and Z *(2mrks)*

END