NAMISINDWA DISTRICT ACADEMIC BOARD

PRIMARY LEAVING MOCK EXAMINATIONS
2024

PRIMARY SEVEN

MATHEMATICS

Time allowed: **2** hours **30** minutes

Index Number:	Random Number						Personal Number		

Candidate's Name: _____

Candidate's Signature: _____

School Random Number: _____

District ID Number: _____

DO NOT OPEN THIS BOOKLET UNLESS YOU ARE TOLD TO DO SO

Read and follow these 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.
3. Answer all questions. **All** answers to 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 answer written in pencils other than on 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. NUMBER	MARKS	EXAMINER INITIAL
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)

1. Work out: [illegible]

2. Write [illegible] in words.

3. Given that set M= {p, l, a, t, e}, find the number of subsets in set M.

4. Find the next number in the sequence [illegible] ____________

5. If MTN call charges sh. 20 per minute, how much money does one pay for making a call of 2 hours?

6. Simplify: $18y - 7m + 5m - 10y$

7. The area of a quadrant below of a circle is $154cm^2$. Calculate the length of its radius.

8. John took 4 hours riding a bicycle at a speed of 30km/h to cover a distance. What distance did he cover?

9. Solve for x: $1\frac{1}{2}x + 5 = 35$

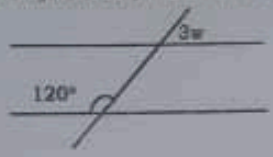
10. What sum of money will yield an interest of sh. 50,000 at a rate of 10% per year for 5 years?

11. **Complete the missing values**

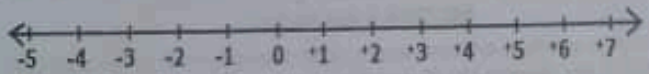
	VI	IX
III	III	
IV		V

12. The Gospel Crusade lasted for 6 days and on Friday. On what day did it start?

13. In the figure below, find the value of **W**



14. On the number line below show the expression: -5 - +6

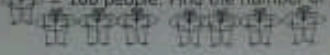


15. Express **0.0405** in scientific notation.

16. Work out using distributive property (500 X 1.7) + (9.3 X 500).

17. Sarah, Mary and Annet shared the sum of money in the ratio **3:4:5** respectively. If Annet got sh. **20,000** more than Sarah. Calculate the amount of money they shared.

18. In last National Housing and population Census an enumerator could represent = 100 people. Find the number of people represented below.

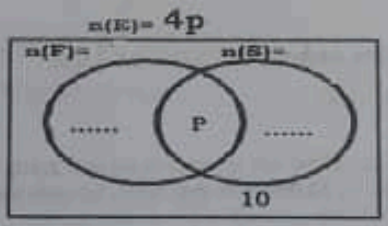


19. Write the afternoon time shown on the clock face in 24 hour system.

20. Using a pair of compasses, a ruler and pencil only construct an angle of **225°**

SECTION B (60 MARKS)

21. On Mary's wedding, **4P**guests were invited. During lunch **P** guests used both forks**(F)**, and **spoons (S)** 30 guests used spoons. The number of guests who used forks only were twice those who used both forks and spoons. 10 guests used hands.
    a. Complete the Venn diagram below. (3 marks)



b. Find the number of guests who used both forks and spoons (**3mks**)

c. What is the probability of picking a guest at random who used free hands? **(1 marks)**

22. (a) Masafu is 3 times as old as his son Masoola. The difference in their age is 24 years. How old is Masafu? **(3 marks)**

(b) Solve for Y: $2(3y - 4) - 3(1-y) = 25$ **(2 marks)**

23. The interior angle of a regular polygon is thrice its exterior angle. Name the polygon.

(4 marks)

24. **(a)**Express as a single number $(2 \times 10^2) + (4 \times 10^1) + (6 \times 10^{-1}) + (8 \times 10^{-2})$ **(3mk)**

(b) Write the square of 14 as the product of its prime factors. **(2marks)**

25. The table below shows mother's expenditure study it and answer questions that follow.

Item	Quantity	Unit cost	Amount
Posho	5kg	Sh. 1,500	Sh. .....
Beans	3kg	Sh.	Sh. 5400
G.nuts	..... Kg	Sh. 5,500	Sh.1,1000
Sugar	$2\frac{1}{2}$ kg	Sh. 4000	Sh. .....
Total			Sh. .....

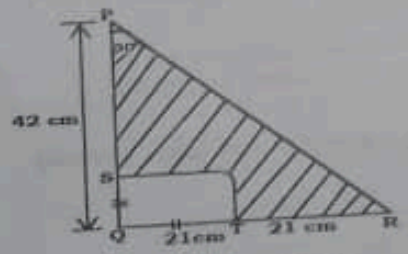
a. Complete the table. **(5 marks)**

b. If she went with sh. 50,000 what was her balance? **(1 mark)**

26. Jane bought a 10 litre jerrycan of fresh milk at sh. 10,000. She cooked and packed in polythene bags using 400ml cup for take way customers.
a. How many 400ml cups did she pack? **(3 marks)**

b. Calculate the amount of money she got after selling cooked milk at sh. 500 each cup. **(2 marks)**

27. In the figure below **PQ=QR=42cm** and **QT=TR=21cm** and **QST** is a sector. Study it and answer questions that follow.



a. Find the area of a triangle **PQR** **(2marks)**

b. Calculate the area of the sector **QST** **(2 marks)**

c. What is the area of the shaded part **(1 mark)**

28. Two taps are used to fill the water tank of capacity 10,000 litres. Tap A takes 20 minutes to fill the tank while Tap B takes 30 minutes.

a. How long does it take to fill the water tank if both taps are opened at the same time **(3 marks)**

b. If both taps are opened for 1minute, what capacity would the tank be holding? **(2 marks)**

29. The temperature on the slopes of Mt. Elgon Monday Morning was -15°C and after noon was +27°C

a. Work out the range in temperature **(2marks)**

b. Calculate the average temperature of that day. **(2 marks)**

30. A lorry driver left home at **9:00am** for Mbale town which is 46 km away driving at 16 Km per hour. At 9:15am the tyre got a puncture and stopped for 15 minutes.

a. What distance did he cover before stopping? **(2marks)**

b. If he is to reach Mbale at 10:00am find the speed to use in the remaining journey. **(3marks)**

31. **The pie chart below shows how a man spends his monthly salary.**

a. Find the fraction he spends on solar power. **(2marks)**

b. If he spends sh. 60,000 on solar power, what is his monthly salary income?
(2 marks)

32. Lwakhakha T.C is **80km** away from Namisindwa T.C on the bearing **090°** and Bubutu T.C is **60km** away from Lwakhakha T.C on the bearing **150°**.
a. Using the scale of 1cm to represent 10 km draw an accurate diagram to show the location of these town councils **(3marks)**

b. Find the distance from Bubutu TC to Namisindwa TC **(2marks)**

END "GOOD LUCK"