KIYINDA - MITYANA DIOCESE CATHOLIC PRIMARY SCHOOLS HEADS' ASSOCIATION (CAPSHA)

THE REPUBLIC OF UGANDA

P. L. E. MOCK EXAMINATION 2024

MATHEMATICS

Time: Allowed 2 Hours 30 Minutes

Random No.						Personal No.		

Candidate's Name: _____ Signature: _____

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

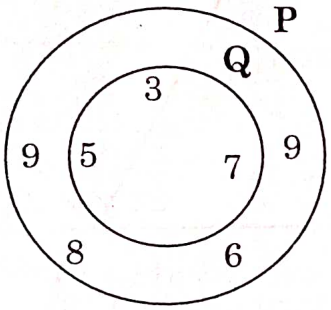
READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. Do not open this booklet until you are told to do so.
2. This paper comprises two sections A and B.
3. Section A has 20 questions (40 marks) Each question carries 2 marks.
4. Section B has 12 questions (60 marks)
5. The paper has 12 pages altogether.
6. All answers to both sections A and B MUST be written in the spaces provided
7. All answers must be written in blue or black ballpoint pen or ink.
8. No calculators are allowed in the examinations room.
9. Diagrams and Graph work must be done in pencil strictly.
10. Un necessary alteration of work will lead to loss of marks.
11. Any handwriting that cannot easily be read may lead to loss of marks.
10. Do not fill anything in the boxes indicated "**FOR EXAMINERS USE ONLY**" and those inside the question paper.

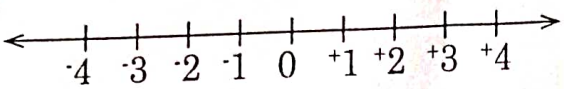
FOR EXAMINER'S USE ONLY		
QN. No.	MARKS	SIGN
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

SECTION A 40 marks.

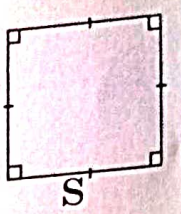
1.	**Divide:** 12012 ÷ 4	2.	**Solve:** 2(x-1) = 4.
3.	Find the range of 6, 3, 0, -1, -4	4.	**Convert:** 0.75Kgs to grams
5.	Work out the difference between $\frac{2}{3}$ and $\frac{5}{12}$	6.	What is the least number of goats such that when shared by 4 people, 3 goats remain, but when divided by 8 people, 7 goats remain?

7.	A forty minute lesson ended at 1:30 pm. At what time did it start?	8.	Given that $201_{Y} = 73_{ten}$. Find the base Y
9.	Find **n(P-Q)** in the diagram below.  	10.	The ratio of two numbers is 3:5 respectively and their GCF is 6. Workout the L.C.M of the two numbers.
11.	Madam GWOKYALA deposited sh. 12,000 in crane bank at an interest rate of 10% for 6 months per month. Find her Simple interest after 6 months.	12.	The school bursar was given a bundle of ten thousand shilling notes numbered consecutively from KV034253 to KV034352. How much money was given to school bursar?

13. Show -6 - -4 on the number line below:

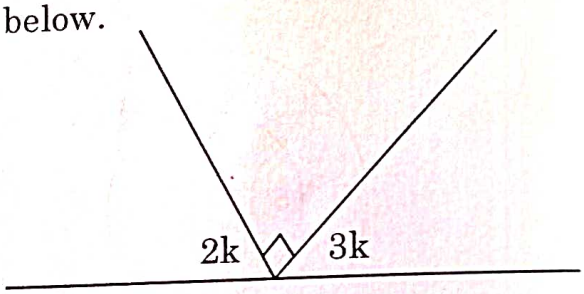


14. The area of the square flower garden below is **1.44m²**. Find the value of S.



15. The teachers' workshop started on Friday and took 20 days. Work out the day of the week on which the workshop ended.

16. Find the value of K in the figure below.



17. Five poles were fixed in a straight line along one side of the road. The poles were fixed at an interval of 15m. Calculate the length of the road.

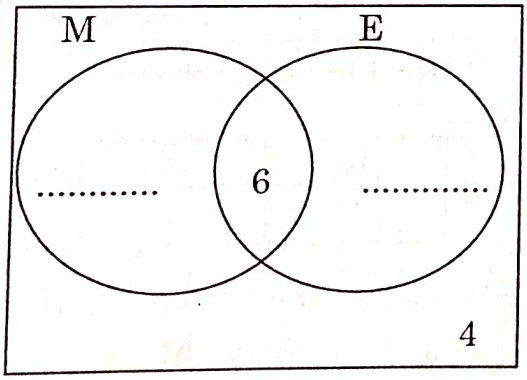
18. Solve the inequality and give the solution, where K is the negative integer. $-2(K-1) \geq 10$

19.	Babirye and Nakato ran 100m in 20 seconds. Express their speed in Km/h	20.	Express 0.00619 in standard form.

SECTION B (60 marks)

21. In a class, 24 pupils like English (E) and 6 pupils like both English and Mathematics, W like only one subject while 4 pupils like none of the two subjects.

a) Use the information above to complete the Venn diagram below



2 marks

b) Given that 20 pupils do not like English, find the number of pupils in the class.

3 marks

22. Two taps P and Q are connected to the tank. Tap P takes 4 hours to fill the tank while tap Q takes Y hours to empty the tank. If both taps take 12 hours to fill the tank, how long does tap Q take to empty the tank?

3 marks

b) A tank is ¼ full of water. When 12 liters are added, the tank becomes $^{2}/_{5}$ full. How many liters does the tank hold when completely full?

2 marks

23. The table below shows the points scored by the pupils of Lutaaya Memorial Primary School in their Quiz competition.

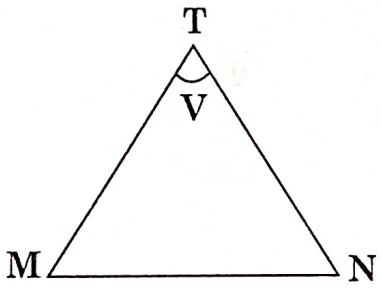
Points	4	7	K	10	9
Number of Pupils	3	5	4	1	7

a) How many pupils did the test?

1 mark

b) Workout the value of **K** if the average of the points is 7.

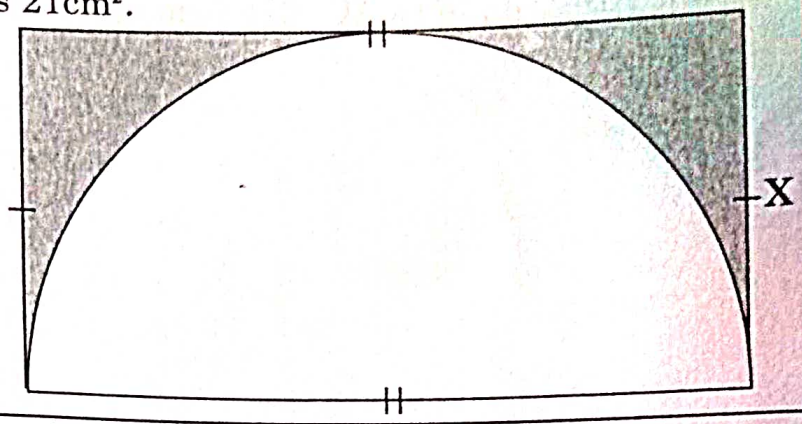
4 marks

24.	The average of three consecutive even numbers is 32. If the second even number is K, b) Work out the numbers. *3 marks*	b)	Work out the range of the numbers. *2 marks*
25.	In the triangle **MTN**, angle **TMN** is twice the size of angle **MTN** and angle **MNT** is 60° more than angle **TMN**.  		
a)	Find the size of angle **MTN** *4 marks*		

b)	Work out the size of angle **TMN** and **MNT** *2 marks*
26.	Lubega is 8 years younger than Yiga. 5 years' time, the ratio of Lubega's age to Yiga's age will be 2:3.
a)	How old is Lubega now?
b)	How old will Yiga be in 5 years' time? *2marks*

27.	Using a ruler, a pencil and a pair of compasses, construct a quadrilateral ABCD where line AB=8cm, lines AC=BD=5cm and angles ABC=BAC=60°. *(04 marks)*
b)	Measure line CD *(1 mark)*

28. In the figure below, a semi- circle is enclosed in a rectangle. The area of the shaded part is 21cm².



a) Work out the value of X. **(Use $\pi = 3\ ^1/_7$)**

3 marks

b) Find the perimeter of the rectangle

2 marks

29. Teacher Kawere sold his goat to teacher Nsibuka at sh. 24,000,000 making a profit of 20%. Teacher Nsibuka later sold the same goat to Teacher Kiiza making a loss of 10%

a) Calculate the amount of money Teacher Kawere paid for the goat. (*03 marks*).

b) How much money did Teacher Kiiza pay for the goat? (*02 marks*)

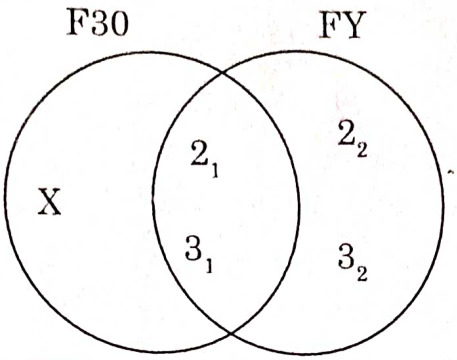
30. Work out $\frac{0.06 \times 0.8}{0.4 \times 0.2}$

3 marks

b) **Simplify:** $\frac{1}{2} - \frac{1}{3} + \frac{1}{4}$

2 marks

31. The diagram below shows the prime factors of 30 and Y.



a) Find the value of;

i) X

1 mark

ii) FY

1 mark

b) Work out the L.C.M of F30 and FY

3 marks

32) Given the digits 4, 0, 2

a) List down three possible numbers that can be formed from the digits above.

(02 marks)

b) Work out the sum of the biggest and the smallest number formed.

(02 marks)