GULU DISTRICT

GULU DISTRICT EXAMINATIONS COMMITTEE

PLE-MOCK EXAMINATIONS 2023

MATHEMATICS

TIME ALLOWED: 2HOURS 30MINS

INDEX NO.:								

CANDIDATE'S NAME: _____

CANDIDATE'S SIGN: _____

SCHOOL NAME: _____

DISTRICT: _____

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

Read the following instructions carefully:

INSTRUCTIONS

1. This paper has **two** sections: **A** and **B.**
2. Section **A,** has 20 questions (40 marks).
3. Section **B** has 12 questions (60 marks).
4. All answers must be written using blue or black pen except drawings to be done in pencil
5. Unnecessary crossings or changes may lead to loss of marks
6. Any handwriting that can not be easily read may lead to loss of marks.
7. Do not fill anything in the boxes indicated for examiners use only.
8. The use of electronic calculators and mathematical tables is not allowed.

EXAMINERS USE ONLY		
QNS	EXAMINERS MARKS	EXAMINERS INITIALS
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:
$$\begin{array}{r} 8\ 9 \\ -\ 3\ 5 \\ \hline \end{array}$$

2. Write 6093 on words.

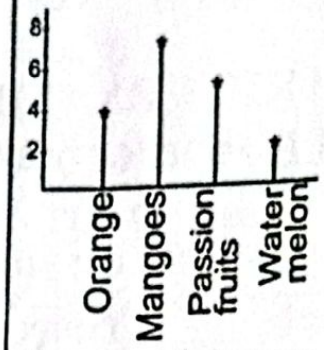
3. Given that set F={2,4,5,6,7}
D={1,2,3,4,5} Find: F-D

4. Find the next number in the sequence

29, 25, 21, 19,_____

5. Simplify 4¼ of 1⅓

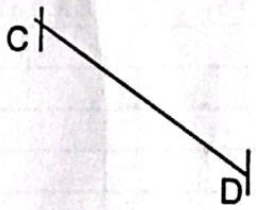
6. The line graph below shows number of fruits a trader sold one day.



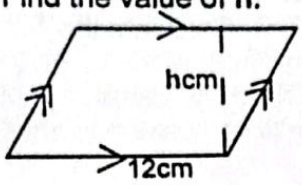
How many fruits were sold by the trader that day.

7. Simplify 2m + 2n+3m - 5n

8. Using a ruler, pair of compasses and a pencil only, drop a perpendicular bisector of line CD passing through point Y.



9. The area of the below figure is 60cm² Find the value of h.

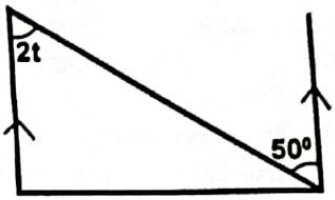


10. Convert 1305hours to twelve hour clock.

11. A candidate bought 12 mangoes at sh.6000. He sold each mango making a loss of sh.100. How much money did he get after selling all the mangoes?

12. It took Mewa bus 3 hours to travel from Gulu to Kigumba at 72K PH. Calculate the distance from Gulu to Masindi.

13. Find the value of t.



14. Find the least number of books which when shared among six or eight pupils, 5 books will remain.

15. Maria will celebrate her birthday next year. Find the probability that she will celebrate her birthdays in a month that has thirty days.

16. Divide 0.06 + 0.2

17. Electric poles are fixed 75metres apart in a straight line. How many poles can be fixed in a distance of 7500metres?

18. The temperature on top of Mt. Wati in the morning was -23°C. At midday, the temperature rose to 7°C. Calculate the temperature range.

19. Work out:

$$\begin{array}{rrrrl} 1 & 1 & 0 & 0 & \text{two} \\ + & 1 & 1 & 1 & \text{two} \\ \hline & & & & \end{array}$$

20. Set P has 31 proper sets. How many elements has set P?

SECTION B

21. Juliana want to a shop and purchased the following items.
2kg of rice oif sh.4800 per kg
1½kg of sugar at shs.5000 per kg
500ml of cooking oil at sh.7000 per litre

(a) If on each item, she was allowed a discount of shs.300, how much money was paid by her?

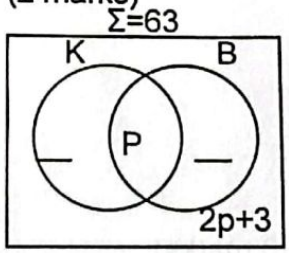
(b) Calculate her change if she went with shs.25000

22. Work out: $\frac{2}{3} \times \frac{3}{5} + 1\frac{3}{5}$

(b) Express 0.6363--- as a common fraction in its simplified form.

23. Out of 63 tourists who came to Uganda, 25 tourist visited Bwindi national gam park (B), P tourists visited both game parks and 2p+3 tourists did not visit any of the two game parks.

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



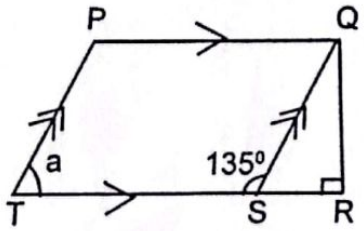
(b) Find the number of tourist who visited both game parks. (2 marks)

(c) If each tourist who visited Murchison falls National game park only paid shs.30,000, how much money was collected from them?

24. (a) Find the solution set for the inequality $a - 3 < 7$ (3marks)

(b) Solve $2k^2 + 4 = 22$ (3 marks)

25. In the diagram below, line PQ is parallel to line TR. Line SR=6cm, SQ=10cm and angle TSQ=135°.



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

26. The interior angle of a regular polygon is thrice its exterior angle. Calculate the interior angle sum of the polygon. (5 marks)

27. The timetable below shows the journey of a bus from Pakwach to Yumbe via some town. Use it to answer the questions that follow.

Destination	Arrival	Departure
Pakwach	____	6:30am
Nebbi	7:40am	8:00am
Arua	9:00am	9:30am
Koboko	11:00am	11:20
Yumbe	12:50pm	___

(a) How long did the bus take to travel from Nebbi to Arua. (1mark)

(b) If Nebbi is 35 kilometers from Pakwach. Calculate the speed of the bus from Pakwach to Nebbi. (2marks)

(c) Calculate the distance from Pakwach to Yumbe if the average speed of the bus for whole journey is 60km/h. (3 marks)

28. In a class, $\frac{1}{5}$ of the girls are boarders while $\frac{1}{3}$ of the boys are day scholars.
60% of the pupils are girls. There are 10 boys who are day scholars.
(a) How many pupils are in the class? (4marks)

(b) Find the number of girls who are borders. (1mark)

29. A cylindrical tin of radius 7cm contains 1,848 litres of cooking oil. 0.616 litres of the cooking oil was used.
(a) Calculate the height of the remaining cooking oil in the tin. (3 marks)

(b) If 0.616 litres of cooking oil was poured in a rectangular tin with a base area of 88cm². Find the height of the cooking oil in the tin. (2 marks)

30. (a) Using a ruler, pencil and pair of compasses only, construct quadrilateral PQRS where PQ=RS=8cm, PR=QS=5cm, angle RPQ=60⁰ and angle SQP=120⁰. (4 marks)

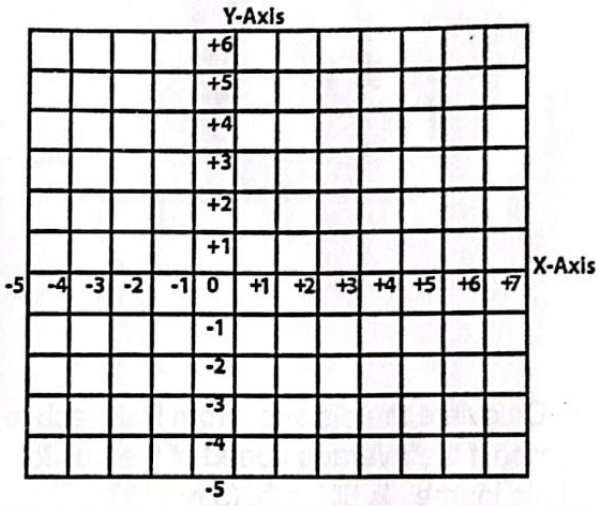
(b) Name the quadrilateral

(1 marks)

31. (a) Solve for P: P+4=2(finite 5) (2marks)

(b) If today is Wednesday 5th July, 2023, what day of the week will it be 21st September, 2023? (3 marks)

32. (a) Plot the points A(⁻2 + ⁺2), B(⁻2, ⁻2), C(+2 + ⁺2) and D(⁺2 - ⁻2)on the coordinates graph bellow. (2marks)



(b) John point A to B , B to C, C to D and D to A. (1 mark)

(c) Calculate the area of the figure formed. (2marks)

END