"In Pursuit of PLE Excellency"

KUCH & ABER EDU-LOG EXAMINATIONS BOARD

PRIMARY LEAVING EXAMINATIONS 2022

OMEGA MASTER

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index No.

EMIS NO.						Personal No.			

Candidate's Name:.....

Candidate's Signature:.....

School Name:.....

District Name:.....

Read the following instructions carefully

1. This paper has two sections: **A** and **B**
2. **All** the working for both sections **A** and **B** must be shown in the spaces provided.
3. **All** working must be done using a blue or black ball point pen or fountain pen. Any work done in pencil other than graphs, pictures and diagrams will not be marked.
4. **No calculators** are allowed in the examination room
5. Unnecessary change of work may lead to **loss** of marks.
6. Any handwriting that cannot be easily read may lead to **loss** of marks.
7. Do **not** write anything in the boxes indicated: **"For Examiners' Use Only"** and those inside the question paper.

FOR EXAMINER'S USE ONLY		
QN. No	**MARK**	**SIGN**
1 - 10		
11 - 20		
21 - 23		
24- 27		
28 -32		
TOTAL		

Please Turn over!

1. Work out: 22 x 4

2. Simplify: $^{-}6 - {}^{-}4$

3. Work out: $\frac{5}{9} \div \frac{2}{3}$

4. Write **XCIX** in Hindu Arabic Numerals.

5. Using a protractor and a ruler, draw an angle of $\mathbf{145^0}$

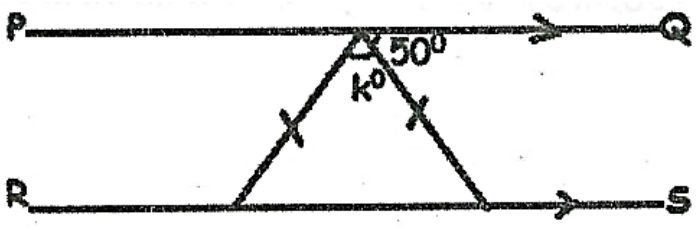
6. Write **99,040** in words.

7. Find the next number in sequence.
   58, 33, 17, 8, _____

8. Solve the inequality: $3 - 2m < 15$

9. Given that set K { g, m, v, z }. Find the number of subjects in set K

10. In the diagram below, find the value of **k**.



11. **Solve:** 3 + m = (finite 5)

12. The prime factors of 12 and 90 are given below

$12 = 2^2 \times 3$

$90 = 2 \times 3^2 \times 5$

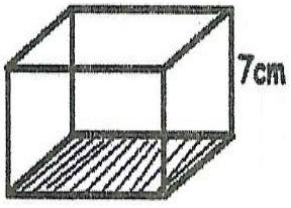
Use the given factors to find the lowest Common Multiples (LCM) of 12 and 90.

13. Given that **m = 5, n = 3** and **r = ⁻2**. Find the value of $\frac{mn}{n-r}$

14. How many packets of 200 grammes can be got from 2.6kg of sugar?

15. A birthday party started at 4:30pm and lasted $2\frac{3}{4}$ hrs. At what time did the party end?

16. The area of the shaded part of the cuboid below is $12cm^2$. Calculate the volume of the cuboid.

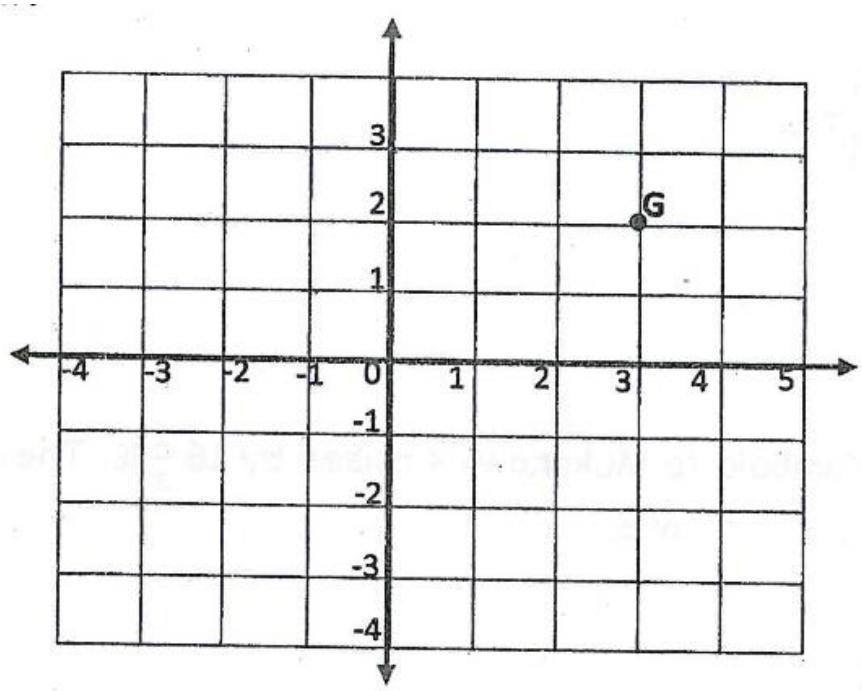


17. The taxi fare from Kampala to Mukono was raised by $16\frac{2}{3}$ %. The old fare was sh. 3,000. Find the new tax fare.

18. In a poultry farm, eggs are packed into boxes which hold 144 eggs. How many boxes of the same size are needed to pack 1,008 eggs?

19. Given that 1 us dollar ($) costs Uganda shillings (UGx) 3672 and 1 Kenya shillings (KES) COSTS UGx 36, Find the cost of 1 US dollar in Kenya shillings

20. **Study the coordinate graph below and use it to answer the questions that follow.**

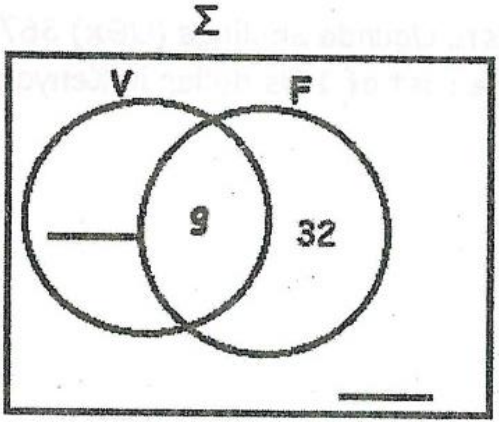


(a) Write the coordinates of point G.

(b) Plot the point H ($^{-}3$, 0) on the coordinates graph

SECTION B (60 Marks)

21. In class, 32 pupils play Football (F) only, g play both Volleyball but not Football while (g - 2) play neither of the two games



(a) Complete the Venn diagram below using the above information.

(02 marks)

(b) Given that 62 pupils play one game only, find the value of g.

(02 marks)

(c) Calculate the number of pupils in the class. (02 marks)

22.a) Simplify: $3\frac{1}{2} \div 2\frac{1}{2} \times 2\frac{2}{5}$ (03 marks)

b) Work out: $\frac{3.9 + 3.6}{0.06 \times 0.5}$ (03 marks)

23. A school bus taking pupils to a game park covered 75% of its journey in $1\frac{1}{2}$ hours. The bus travelled at a steady speed of 80 kilometres per hour. Find how far the school is from the Game park. (04 marks)

24. Pupils did a test and scored marks as shown in the table below.

Marks	**50**	**K**	**45**	**80**
No. of pupils	**2**	**6**	**3**	**4**

a) How many pupils did the test? (01 mark)

b) Find the value of K the mean mark was 61. (03 marks)

c) What was the range of the marks? (01 mark)

25a) Work out: $3\ 3\ 4_{five}$

$+\ 1\ 2\ 3_{five}$ (02 marks)

b) Given that $34_t = 112_{four}$, find the value of ***t.*** (3 Marks)

26a) Using a ruler, a pencil and a pair of a compasses only; Construct a parallelogram ABCD such that line AB = 7cm, BC = 5cm and angle ABC = 120^0. (5 Marks)

ii) Drop a perpendicular line from D to meet AB at M.

b) Measure the line DM_____CM . (01 mark)

27. The list below shows the prices of different items in a certain shop (3 marks)

2kg of sugar shs 6,800

500g of posho costs shs. 1,600

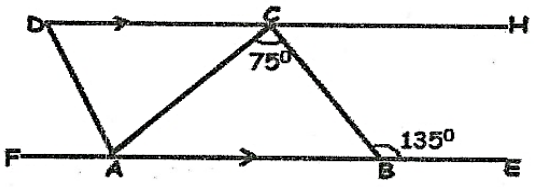
1 kg of beans costs shs. 3,000

3 bars of soap costs shs. 106500

a) How much money will Opio pay for 3kgs of sugar? (02 marks)

b) Nakito buys 1kg of beans, $1\frac{1}{2}$ kg of posho s of soap. How much money does she pay? (03 marks)

28. In the diagram below, line DH is parallel to Fe. Angle ACB = 75^0 and angle CBE = 135^0, Angle FAD is twice angle DAC. Study the diagram and use it to answer the questions that follow.



a) Calculate the size of angle DAC. (02 marks)

b) Find the size of angle ADC. (02 marks)

29. In a market, the cost of a pawpaw is shs. 800 more than the cost of a mango. A mango costs two thirds of a pineapple. The total cost of the three fruits is shs. 4300. Calculate the cost of a pineapple (04 marks)

30. A water tank with a capacity of 4,800 litres was $\frac{1}{2}$ full. Some of the water was sold using 20 litre jerrrycans at shs. 200 each. After the water $\frac{1}{6}$ of it remained.

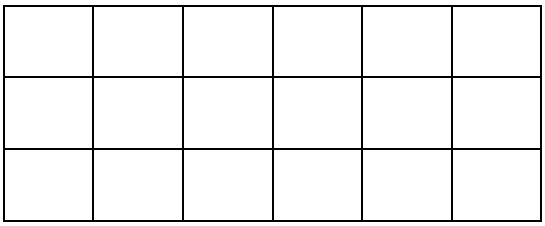
a) Find the amount of water which was sold. (03marks)

b) Calculate the amount of money earned from the sale the water.

(02 marks)

31. At a Kampala Bus Park, buses travelling to Arua and Mbarara leave after every 40 minutes and 50 minutes respectively. The first buses to the two towns leave together at 6:00am. At what time will the buses to the two towns leave Kampala together again? (04 marks)

32. The figure below represents a rectangular floor which is covered by square tiles of area 400cm^2 each. Use it to answer the questions that follow



a) Find the area of the rectangular floor. (02 marks)

b) Calculate the perimeter of the rectangular floor. (04 marks)

THE END