UGANDA NATIONAL EXAMINATIONS BOARD

PRE – PRIMARY LEAVING EXAMINATIONS (GREENHILL)

2023

MATHEMATICS

Time allowed: 2 hours 30 minutes

Index No.	**Random No.**						**Personal No.**		

Candidates Name: .....

Candidates' Signature: .....

School Random No: .....

District ID: .....

Read the following 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**. This paper has **12 pages** printed altogether.
3. Answer **all** questions. All the working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** working must be done using a **blue** or **black** ball point pen or ink. Any work done in pencil other than 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 be easily ready may lead to loss of marks.
7. Do not fill anything in the box indicated: **"For examiners' use only**" and the boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
QN. NO.	**MARKS**	**EXR'S NO**
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

Answer **all** questions in this Section

Questions **1** to **20** carry two marks each

1. Work out:
$$\begin{array}{r} 3 \\ \times\ 8 \\ \hline \\ \hline\hline \end{array}$$

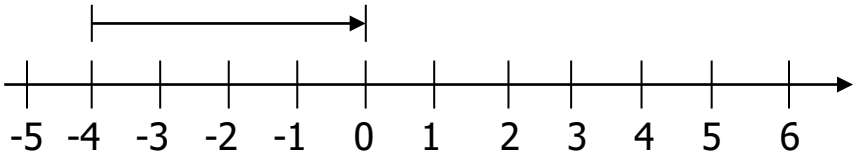
2. If a = 7, find the value of $a^2 + a$

3. A = { Kato, Oloka, Nambi, Auma }
   B = { Awinjo, Oloya, Kantono, Namboozo}
   Find $A \cap B$

4. Write "Eighty thousand, eight hundred eight," in figures.

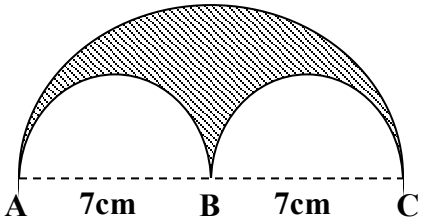
5. Factorise completely: 2xy – 4x

6. What integer is represented by the arrow on the numberline below.



7. Given that  represents 15 eggs and a tray carries 30 eggs, find the number of trays in 

8. The figure below is made up of 2 small semicircles and one big semi circle.



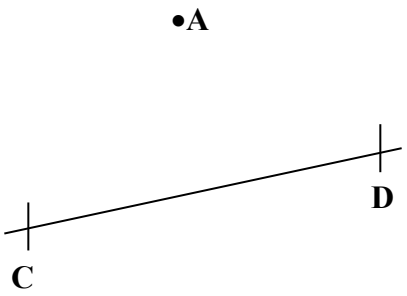
Find the perimeter of the figure.

9. Express shs. 400 as a percentage of sh. 1600.

10. Find the next number in the sequence;

1, 8, 27, 64, _____

11. Drop a perpendicular from point A to meet line CD at point M.



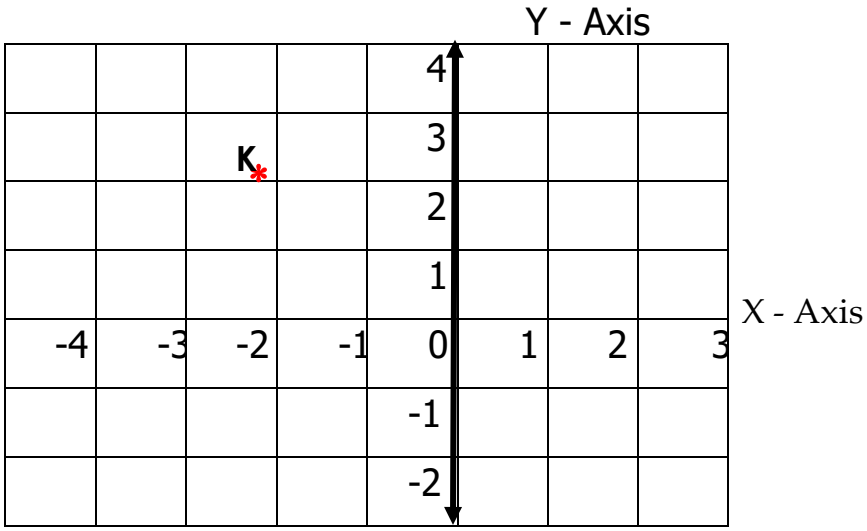
12. A 50-minute test ended at 11:00 a.m. At what time did it begin?

13. Represent: 1010_{two} on an abacus.

14. Using the clock face below, write the afternoon shown.

15. Work out the square root of: $1\frac{11}{25}$

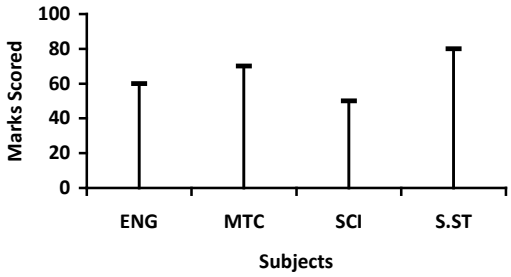
16. From the grid below, give the co-ordinates of point K.



17. The ratio of red pens to blue pens in a box is 2:3 respectively. How many red pens are in the box if the number of blue pens is 15?

18. Find the fractional equivalent of 0.7272 …. in its lowest terms.

19. The line graph below shows Katongole's performance in term I examinations.



What was Katongole's lowest mark?

20. Binojjo deposited shs. 150,000 in a bank that offers a simple interest rate of 4% p.a. How much was Binojjo's interest after a period of 8 months?

SECTION B: 60 MARKS

Answer **all** the questions in this Section

Marks for each question are indicated in brackets

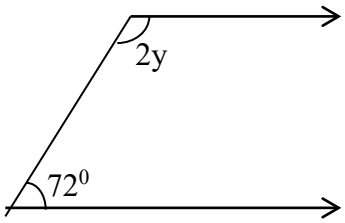
21. a) At a birthday party, children were served with 2 queen cakes each, adults were served with 3 meat pies each and each member who attended was served with a bottle of soda. If 48 queen cakes and 72 meat pies were served, how many people attended the party?

(3 marks)

b) If a crate of soda contains 24 bottles and costs 12,000/= how much was spent on soda's?

(2 marks)

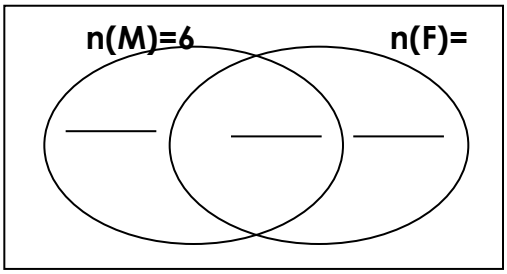
22. (a) Study the figure below carefully and find the value of y. **(2 marks)**



b) The complement of $2x - 10^0$ is 50. Find the value of **x**. **(2 marks)**

23. In a family of 10 members. 6 members eat meat (M), 4 members eat both meat and Fish (F) while (y) members eat only Fish.

a) Represent the above information on the venn diagram below. **(3 marks)**



b) Find the value of y. **(2 marks)**

c) How many members eat fish? **(1 mark)**

24. Two bells are rung at intervals of 40 minutes and 50 minutes for lower and upper pimary classes respectively.

a) After how many minutes will the two bells be sounded together?

(3 marks)

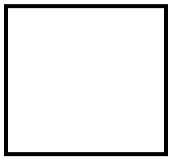
b) If they are sounded together for the first time at 8:00 a.m. at what time will the two bells sound together for the second time? **(2 marks)**

25. a) Simplify: $2(x - 3) + 3(3x - 1) = 13$. **(3 marks)**

b) Work out: $\frac{0.72 \times 1.8}{0.9 \times 2.4}$ **(3 marks)**

26. In a test, 3 pupils scored 50 marks each, 2 pupils scored 60 marks each, 4 pupils scored 80 marks each and 1 pupil scored 90 marks. Find the average mark of the pupils in the test.

(4 marks)



27. a) Work out: (88 x 4) – (48 x 4) using the distributive property only.

(2 marks)

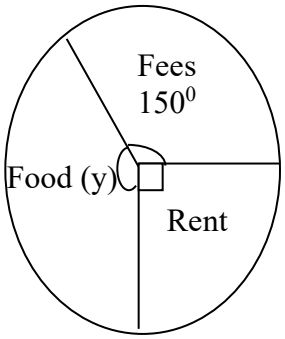
b) Write 0.00726 in scientific form. **(1 mark)**

c) Musa a teacher at Greenhill Academy, wrote three digits; 3, 0 and 8 on the blackboard. Write the smallest three digit number that can be formed using the digits above. **(1 mark)**

28. Lubanga drove at 55km/hr for 2 hours from town A to town B. He then continued to C at 40km/hr for 3 hours. Calculate his average speed for the whole journey.

(3 marks)

29. The pie chart below shows how Mr. Don spends his monthly salary of shs. 720,000. Use it to answer questions (a),(b) and (c).

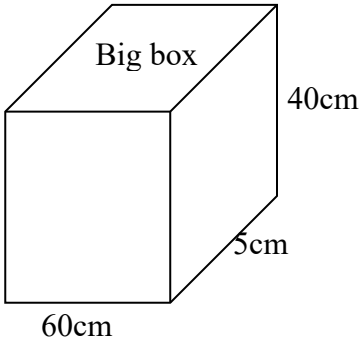


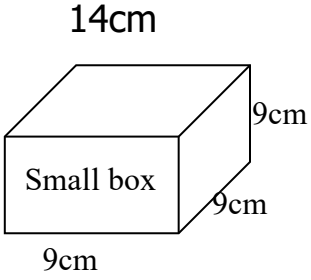
a) Find the value of y. **(2 marks)**

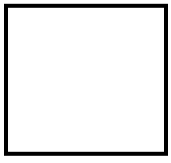
b) How much does Don spend on Rent per month? **(2 marks)**

c) How much less does Don spend on food than fees? **(2 marks)**

30. The diagram below shows a big box 60cm long, 50cm wide, 40cm high and a small box 9cm long, 9cm wide and 9cm high.
Study it carefully and answer the questions that follow.







If such small boxes are to be packed into the big box.

a) Find the number of small boxes that will be packed in the first layer of the big box.

(2 marks)

b) How many layers will fill the big box? **(2 marks)**

c) How many small boxes will fill the big box? **(2 marks)**

31. Okello went shopping and bought the following items.
4 kg of rice at shs. 1800 per kg
3kg of posho for shs. 1300 each kg
500g of onions at shs. 2000 per 250gm.
A bunch of matooke for shs. 9000
a) Work out his total expenditure. **(4 marks)**

b) If Okello was offered a discount of 10% how much did he pay? **(2 marks)**

32. a) With the help of a ruler, sharp pencil and a pair of compasses only, construct a triangle ABC in which angle $\overline{AB}C = 60^0$, BC = 7cm, and $\angle BAC = 90^0$. Drop a perpendicular from A to meet BC at X. **(5 marks)**

b) Measure the length of AX **(1 mark)**

END