



HILLSIDE PRIMARY SCHOOL

EXAMINATIONS

2023

MATHEMATICS (SET FOUR)

Time Allowed: 2 Hours 30 Minutes

Index No.

Random No.					Personal No.		

Candidate's Name.....Stream.....

Candidate's Signature.....

EMIS No.....

District Name.....

Read the following instructions carefully:

1. The paper has **two** sections: **A** and **B**.
Section **A** has 20 questions and Section **B** has 12 questions
2. Answer **all** questions. All answers to both sections **A** and **B** must be written in the spaces provided.
3. **All** working must be done using a blue or black ball-point pen or fountain pen. Any work written in pencil other than graphs and diagrams will not be marked
4. No calculators are allowed in the examination room.
5. Unnecessary changes in work may lead to loss of marks. Any handwriting that cannot easily be read may lead to loss of marks.
6. Do not fill anything in boxes indicated: **"For Examiners' Use Only"** and those inside the paper.

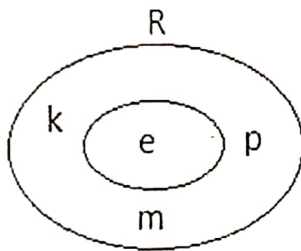
FOR EXAMINERS' USE ONLY		
Qn. No.	MARKS	EXRS' NO
1- 5		
6- 10		
11- 15		
16- 20		
21- 22		
23- 24		
25- 26		
27- 28		
29- 30		
31- 32		
TOTAL		

SECTION A: (40marks)

1. Workout: $42 + 53$

2. Write 40,402 in words

3. Calculate the number of subsets in set R below




4. Find the next number in the sequence below;
42, 40, 36, 34, 30, __

5. Work out: $1\frac{2}{5} \div \frac{1}{5}$

6. Take $5w - 4$ away from $9 + 7w$

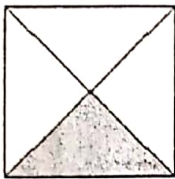
7. Simplify; $^{-}11 - ^{-}5$

8. Using a ruler, a pencil and a pair of compasses only, construct an angle of 240°

9. In Gogonyo village, there are 65 huts. Given that  represents 13 huts, draw a pictograph to represent the above information

10. Simplify : $5 - 9 + 12 \div 2$

11. What percentage of the figure below is **un-shaded**?



12. Express 54 as a product of its prime factors.

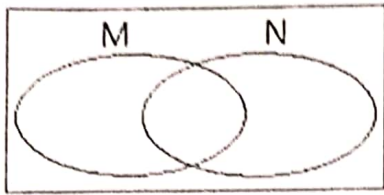
13. Given that a US dollar costs Ug.sh. 3650, find the amount in Uganda shillings one can pay for a TV set which costs US dollars 120.

14. Find the **value** of 2 in 1203_{four}

15. The Non-teaching staff meeting at Hillside Schools ended at 1:25pm. If it lasted for three hours and forty minutes, when did it start?

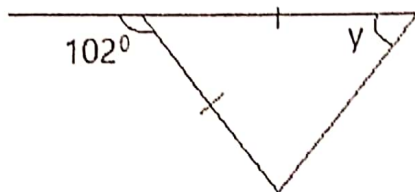
16. Solve the equation: $2(1 + h) = 12$

17. Shade $(N - M)'$ in the diagram below

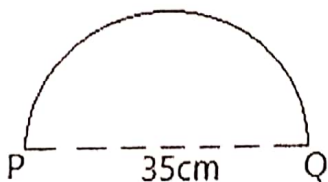


18. Eight boys take 10 days to slash the compound. How much longer will four boys take to slash the same compound working at the same rate?

19. Study the figure below and calculate the value of y



20. Find the length of the arc PQ in the figure below



SECTION B: (60 marks)

21. The sum of three consecutive odd numbers is 117.

a) Find the numbers.

(4 marks)

b) Express the largest number in Roman numerals.

(1 mark)

22. A wheel barrow tyre covered a distance of 1.32km after making 1200 revolutions. Calculate its diameter

(4 marks)

23. a) Simplify: $\frac{3.6-2.52}{0.4 \times 0.018}$

(3 marks)

b) Simplify: $\frac{2}{3} - \frac{1}{6}$ of $1\frac{1}{2}$

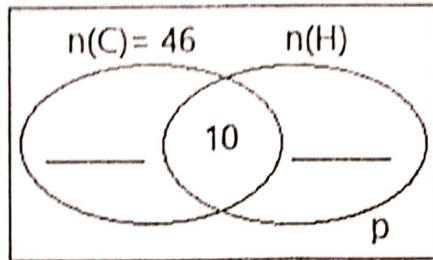
(2 marks)

24. In a group of 80 adults, 46 were vaccinated against Covid 19 (C), $(p+6)$ were vaccinated against Hepatitis B (H) only, p were vaccinated against other diseases, while 10 were vaccinated against both Covid 19 and Hepatitis B

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

(2 marks)

$$n(\varepsilon) = 80$$

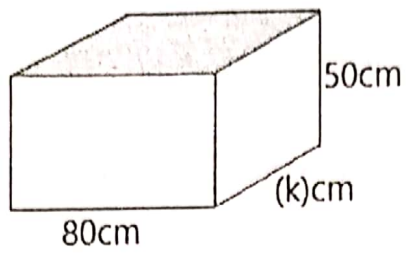


b) Find the value of p .

(3 marks)

- c) If an adult is picked from the group at random, what is the chance of picking one who was vaccinated against Hepatitis B? **(1 mark)**

25. Given that the area of the shaded region is 5600cm^2



a) Find the value of k

(3 marks)

b) Calculate its capacity

(2 marks)

26. The table below shows the denominations, number of notes and amount.
Complete it carefully with correct working, if the grand total is sh. 154,000.

(5 marks)

Denominations	Number of notes	Amount
One thousand shilling note	15	Sh. 15,000
Two thousand shilling note	7	Sh.
Five thousand shilling note	Sh. 45,000
..... note	4	Sh. 40,000
Twenty thousand shilling note	Sh.
TOTAL		Sh. 154,000

27. Kakwezi was given a task of serving pencils by her class teacher. She served 6 pencils per pupil, 1 pencil remained, she decided to serve 5 pencils per pupil and 4 remained. She got annoyed gave 7 pencils to every pupil and nothing remained. What was the least number of pupils Kakwezi served?

(4 marks)

28. Acio allocated $\frac{1}{2}$ of her land to Achelam, $\frac{1}{4}$ of the remainder to Opiko and she remained with the rest.

a) Find the fraction allocated to Opiko. **(3 marks)**

b) If Acio remained with 2.1 hectares, how much land did she have at first? **(2 marks)**

29. Esekuna's age is a quarter of that of Suruni. In 6 years' time, Suruni's age will be twice that of Esekuna.

a) How old is Esekuna now? **(3 marks)**

b) What was Suruni's age 4 years ago?

(2 marks)

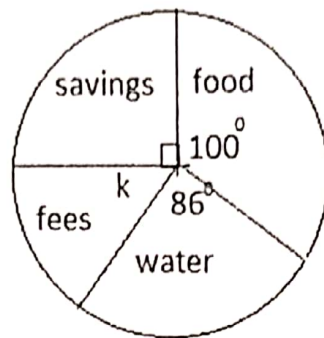
30. a) Using a pair of compasses, a ruler and a well sharpened pencil,
construct triangle PMK where $PM = 4\text{cm}$, angle $PMK = 120^\circ$ and $MK = 7\text{cm}$.

(4 marks)

b) Draw a perpendicular line from point M to meet line PK at N

(1 mark)

31. The pie chart below shows Mr Kabuye's weekly savings and expenditure. Use it to answer questions that follow.



- a) Find the angle sector for fees.

(3 marks)

- b) If his weekly earnings is sh. 54,000, how much does he save in a month?

(3 marks)

32. Masete left town Q driving at a steady speed of 84km/hr for $1\frac{1}{4}$ hours and then rested for 15 minutes for the engine to cool. He then continued with his journey driving at a steady speed of 60km/hr and covered the remaining 150km.

a) Find the distance he covered before resting. **(2 marks)**

b) Calculate Masete's average speed for the whole journey. **(3marks)**

END