



HILLSIDE PRIMARY SCHOOL
BEGINNING OF TERM THREE EXAMINATIONS

2022

MATHEMATICS (SET TWELVE)
Time Allowed: 2 Hours 30 Minutes

Index No.

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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: 40 MARKS

Answer **all** the questions in this section

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

1. Subtract:

$$\begin{array}{r} 160 \\ - 26 \\ \hline \\ \hline \end{array}$$

2. Round off 89.96 to the nearest one place of decimal.

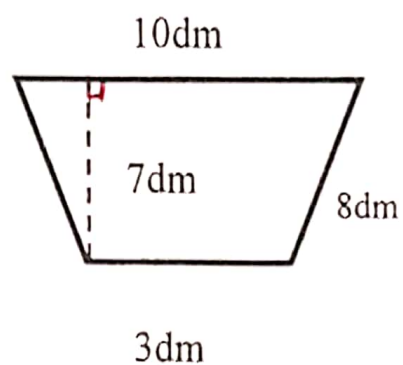
3. Express 1650 hours to 12-hour clock system.

4. How many 350ml bottles can be obtained from a 14litre container?

5. Find the next number in the sequence below:

81, 27, 9, 3, _____

6. Calculate the area of the figure below



7. Reduce sh.240,000 by 20%

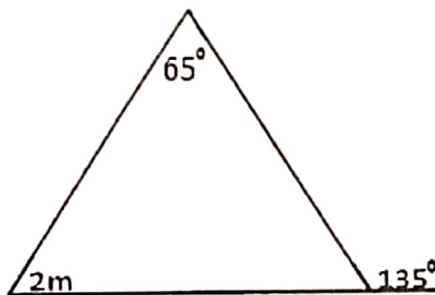
8. Solve for m : $5^{3m} \div 125 = 1$

9. Simplify: $72 \div 8 \times 3$

10. Find the distance round a circular garden of diameter 100m ($\pi=3.14$)

11. Find the lowest Common Factor (L.C.F) of 12 and 18

12. Find the value of m in the figure below.



13. A school bursar issued receipt numbered consecutively from 901 to 950. If each receipt was issued for 20,000. How much did he collect altogether?

14. Expand 294.63 using powers of ten

15. Solve for P: $\frac{p}{4} + 3 = 6$

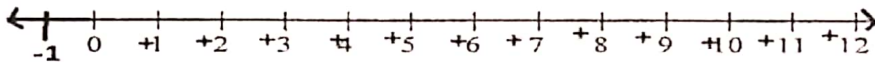
16. Using a ruler, a pencil and a pair of compass, construct an angle of 105°

17. Given that $P=\{a, b, c, d, e, f\}$ and $K=\{a, e, i, o, u, y\}$.

Find $n(P)^1$

18. Simplify: $\frac{2}{3} - \frac{3}{4} + \frac{1}{2}$

19. Using the number line below work out 3×4

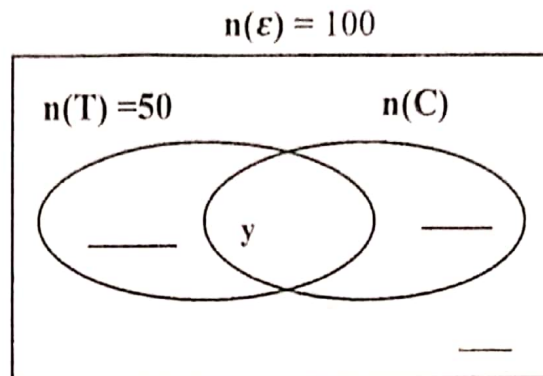


20. The perimeter of a rectangle is 44m. if its width is 9m. find its length.

SECTION B: 60 MARKS

21. In a class of 100 pupils, 50 like Tea (T), $y + 12$ like coffee only, y like both Tea and Coffee while 18 like neither of the two drinks.

- (a) Use the information given above to complete the Venn diagram below. (3marks)



- (b) How many pupils like coffee altogether? (2 marks)

22. The exchange rates at a forex bureau are given as follows.

US\$1 costs Ug sh 3000

K sh 1 costs Ug sh 30

a) A trader has US \$ 1450. How much Uganda shillings does he have?

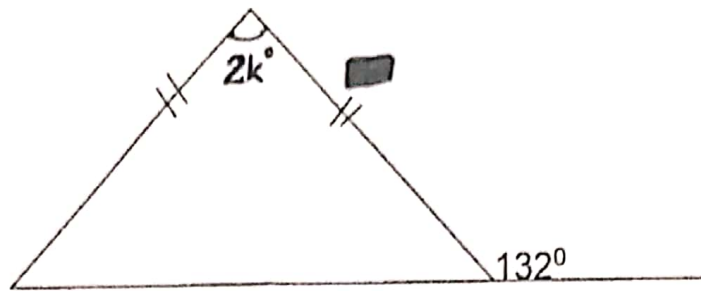
(2 marks)

b) A radio costs Kshs. 4500. How much United Statesdollars does the same radio cost?

(3 marks)

23.a) The complement of $2K - 30^\circ$ is 50° , find the value of K. (2 marks)

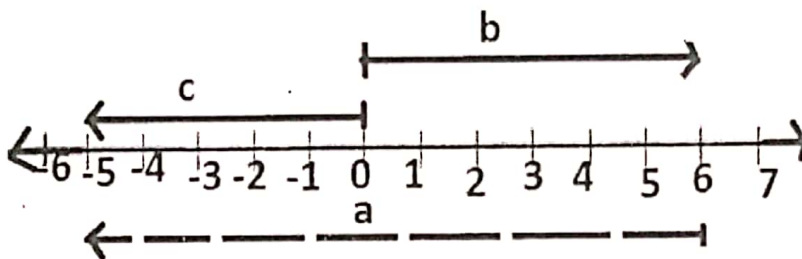
b) Study the diagram below carefully and answer questions about it.



Find the value of k

(3 marks)

24. Study the number line below and use it to answer questions that follow.



a) Write integers represented by;

A..... (1 mark)

b..... (1 mark)

c..... (1 mark)

b) Write the mathematical sentence represented on the number line.
(2 marks)

25.(a) Solve: $-15 \leq 3y - 3 \leq 6$ (3 marks)

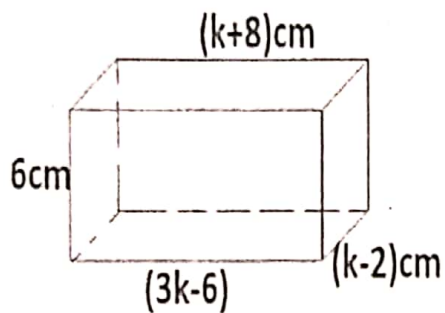
b) Write down the solution set for inequality above. (2 marks)

26. Use the number 36.427 to answer questions that follow.

a) What is the value of 2 (2marks)

(b) Find the product of the value of 3 and the place value of 7. (3 marks)

27. The figure below is a cuboid, use it to answer questions that follow.



a) Find the value of K (2 marks)

b). Calculate its volume. (3marks)

28. a) Find the highest number that can divide 30 and 36 without leaving a remainder. (2 marks)

b) The Lowest Common Multiple (L.C.M) of two numbers is 60 and their Greatest Common Factor (G.C.F) is 10 if the first number is 30. Find the second number. (2 marks)

29. A man spends $\frac{1}{4}$ of his salary on food, $\frac{1}{3}$ on clothing, $\frac{1}{6}$ on fees, $\frac{1}{12}$ on DSTV and banks the rest which is sh.270,000.

a) What fraction of the Salary does he bank? (3 marks)

b) How much does he earn as salary?

(2marks)

30. a) With the help of a ruler, a pencil and a pair of compasses only, construct a rectangle HELP in which $HE = 8\text{cm}$ and $EL = 6\text{cm}$.

(4 marks)

b). Measure angle EHL

(1 mark)

31. A motorist takes 3 hours to cover a distance at 60km/hr but it takes only 2 hours to return through the same distance.

a) Calculate the average speed of the car for the whole journey.

(3 marks)

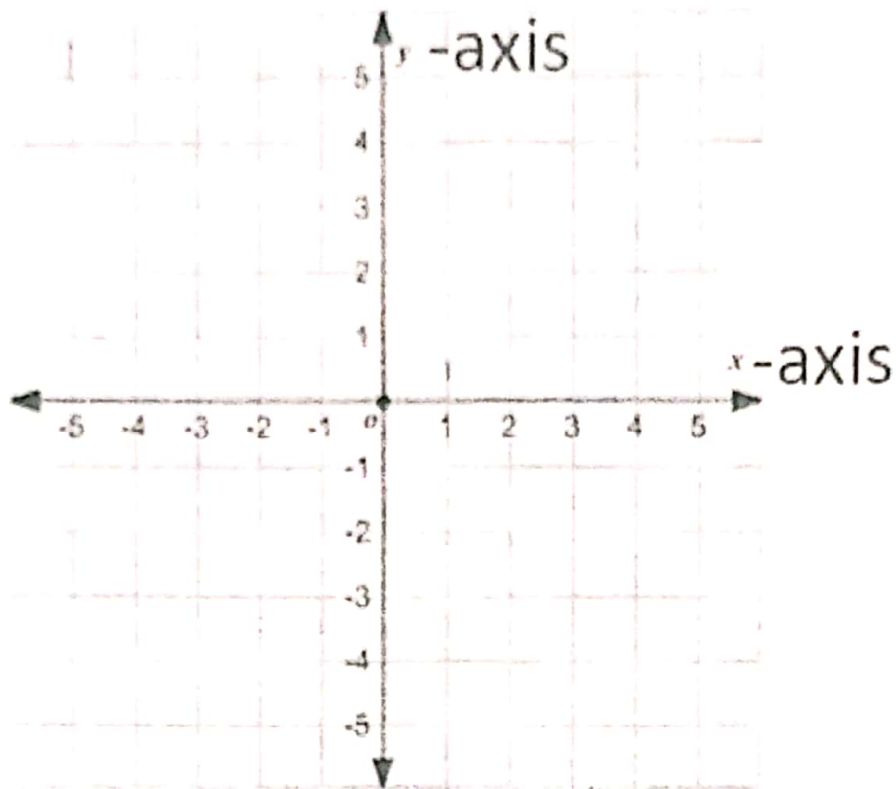
b) Express the average speed in (a) above in metres per second.

(2 marks)

32. a) Plot the following co-ordinates on the grid below.

P (-2, 3), Q (3, 3), R (3, -1), S (-4, -1)

(4 marks)



b) Join P to Q, Q to R, R to S and S to P (1 mark)

c) Name the figure formed.

(1 mark)

END