



HILLSIDE PRIMARY SCHOOL
PRE-PRIMARY LEAVING EXAMINATIONS
2023

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

Index No.

Random No.					Personal No.		

Candidate's Name.....

Candidate's Signature.....Stream.....

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)

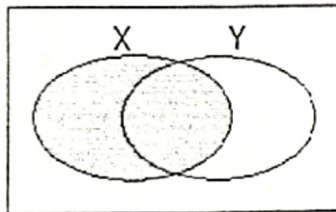
1. Subtract:

$$\begin{array}{r} 597 \\ - 353 \\ \hline \end{array}$$

2. Write **forty five thousand forty four** in figures.

3. Find the next number in the sequence below;
30, 28, 25, 20,

4. Describe the un-shaded region in the Venn diagram below

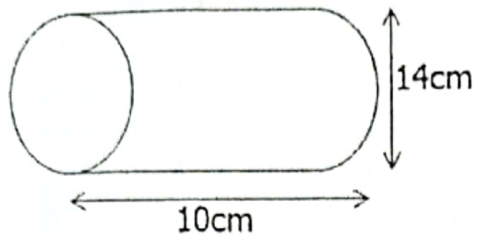


5. Use distributive property to work out.

$$(55 \times 10) - (44 \times 10)$$

6. Write LXV in Hindu Arabic numerals.

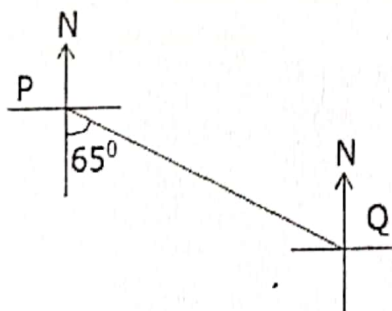
7. Calculate the base area of the figure below.



8. Solve the inequality and write the solution set for;

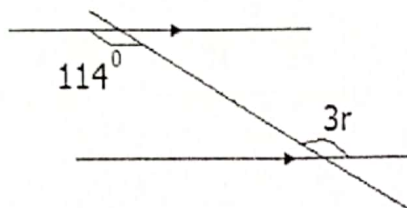
$$3p + 10 \leq 4$$

9. Find the bearing of Q from P in the diagram below.

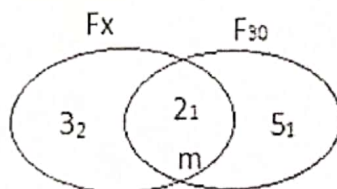


10. Express 2800g as kg

11. Find the value of r in the figure below



12. Find the Greatest Common Factor(GCF) OF X and 30 in the diagram below



13. After marking $\frac{3}{5}$ of the papers, a teacher was remaining with 52 papers to mark. How many papers did he have at first?

14. How many complete revolutions does a bicycle wheel of diameter 35 dm. make to cover a distance of 2.2 kilometres?

15. Express 21 05hours to a 12 hour clock system.

16. John bought an item at sh. 12,000 and later sold it at a profit of 20%. At what price did John sell his item?

17. The median of 2, 3, a, 4, 5 and 6 is 4 as they are arranged. Find the value of a.

18. What is the **place value** of 2 in 123_{five} ?

19. In a bundle of five thousand shilling notes are numbered MJ00040 to MJ00090. How much money is in the bundle?

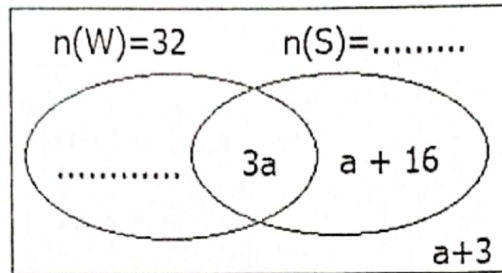
20. Work out: $3 + 2 = \underline{\hspace{2cm}}$ (finite 5)

SECTION B: (60 marks)

21. During the teachers' workshop, some teachers took soda (S), some took water (W), while others decided not to take any of the two drinks as shown in the Venn diagram below.

a) Complete the Venn diagram below.

(2 marks)



- b) If the number of teachers who took water is equal to the number of those that took soda only, find the value of **a** (2 marks)

- c) Find the probability of picking of a teacher that took none of the above drinks to present. (1 mark)

22. a) Find the number whose scientific notation is 3.8×10^2 (2 marks)

b) Solve: $3^k \times 3 = 81$ (3 marks)

23. a) Simplify: $\frac{0.45 \times 0.03}{0.03 \times 0.5}$ (3 marks)

b) Work out : $\frac{3}{4} + \frac{2}{5}$ (2 marks)

24. Kennedy bought the following items from a shop.

- 2kg of rice at sh. 5,500 per kg
- 4 litres of milk at sh.1,100 per half litre
- 2 bars of soap at shs.6,000

a) Calculate his total expenditure. (4 marks)

b) If he had sh.50,000, what was his change? (1 mark)

25. A father is three times as old as his son. In 15 years, the father will be twice as old his son.

a) How old is the father now? (3 marks)

b) Find the age of the son in 20 years' time (2 marks)

26. Given the number 9346, use it to answer the questions that follow.

a) Identify the **place value** of the last digit in the number above.

(1 mark)

b) Write the above number in words.

(2 marks)

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.....

c) Work out the sum of the value of 9 and the place value of 4 in the above number.

(3 marks)

27. a) Using a ruler and a pair of compasses only, construct a rhombus ABCD whose diagonals are 8cm and 6cm.

(4 marks)

b) Measure length AB.

(1 mark)

28. In Kanoni P/s bells for lower and upper Primary are rung every after 30minutes and 40 minutes respectively for lessons to begin.

a) After how long will the two bells ring together again? (3 marks)

d) If they rung for the third time at 2:00p.m. at what time did the two bells ring for the second time. (2 marks)

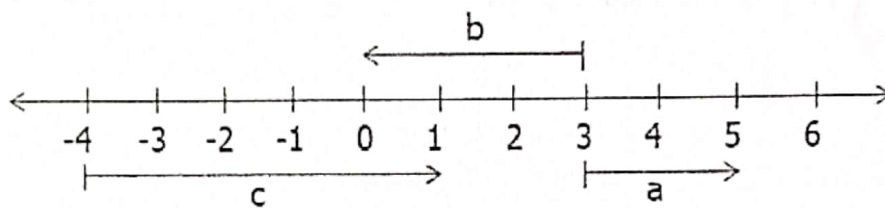
29. A land dealer sold $\frac{1}{5}$ of his land. He used $\frac{2}{5}$ of the remaining land for cultivation. The remaining 12 hectares were used for cattle rearing.

a) Find the fraction for cattle rearing. (3 marks)

b) How big was his land?

(2 marks)

30. Use the number line below to answer the questions about it.

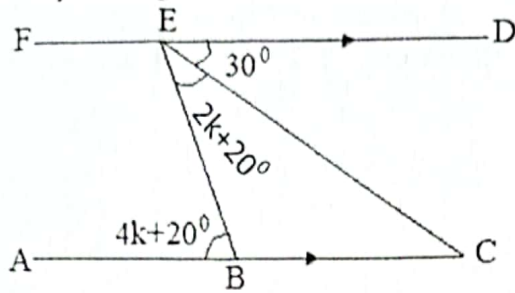


a) Name the integers represented by arrows (3 marks)

i) $a = \dots\dots\dots$ ii) $b = \dots\dots\dots$ iii) $c = \dots\dots\dots$

b) Work out the sum of integers **a** and **c**. (2 Marks)

31. Study the figure below and use it to answer the questions that follow.



a) Find the value of k

(2 marks)

b) Work out the size of angle CBE.

(2 marks)

32. John harvested 300 bags of groundnuts each weighing 100kg.

a) How many tonnes of groundnuts did he harvest? (3 marks)

b) If the groundnuts were packed in 25kg bags for export, how many bags were exported? (2 marks)

END