

SIR APOLLO KAGGWA SCHOOLS - SINCE 1996
HUB-TEST SET IV TERM 3, 2022
PRIMARY SEVEN
MATHEMATICS

Time allowed: 2 hours 30 minutes

Index No.	EMIS NO.	Personal No.																
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> </tr> </table>									<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%; height: 20px;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> </tr> </table>								

Candidate's Name: _____

Candidate's Signature: _____

District Name: _____

School Name: _____

Read the following instructions carefully:

1. The paper has two sections: **A** and **B**
2. Section **A** has 20 short questions (40 marks)
3. Section **B** has 12 questions (60 marks)
4. Answer **ALL** questions. All answers to both Sections **A** and **B** must be written in the spaces provided.
5. All answers must be written using a blue or black ball point pen or ink. Diagrams should be drawn in pencil.
6. Unnecessary alteration of work may lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks.
8. Do **not** fill anything in the boxes indicated for Examiner's use only.

FOR EXAMINER'S USE ONLY		
Qn. No	MARK	SIGN
1 – 10		
11 – 20		
21 – 30		
31 – 32		
TOTAL		

Turn over

SECTION A (40 MARKS)

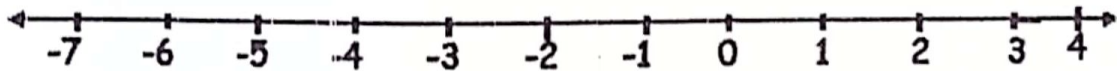
Answer all the questions in this section

Question 1 to 20 carry two marks each.

1. Work out: 41×3

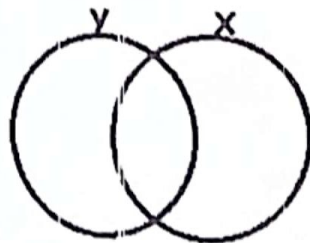
2. Write in figure: Four hundred eight thousand, forty nine.

3. Work out: $-6 - -4$ on the number line below.



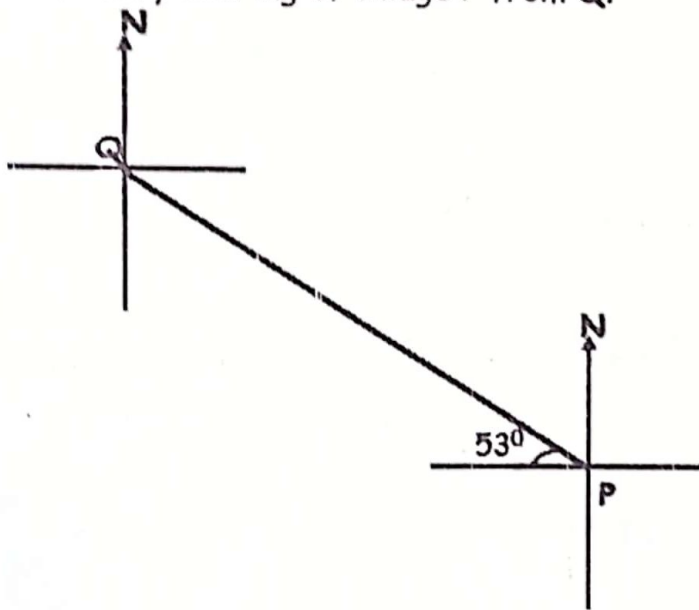
4. Subtract: $3k + 3$ from $4k - 4$.

5. In the Venn diagram below, shade the complement of the intersection of Y and X



6. Work out: $3\frac{1}{3} \div 2\frac{1}{4}$

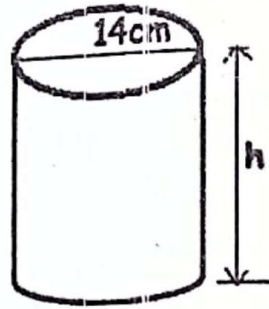
7. The diagram below shows the positions of two villages P and Q. Use it to find the ordinary bearing of village P from Q.



8. Work out: $(72.5 \times 950) - (72.5 \times 850)$ using distributive property.

9. Prime factorize 72 and give your answer in set notation.

10. The figure below is a cylindrical container whose volume is 3080cm^3 . Find its height.



11. Using a pair of compasses, a ruler and a pencil only, construct an angle of 135° at point k.

●
k

12. Aman's salary was reduced by $12\frac{1}{2}\%$. If he was earning sh. 480,000, calculate his new salary.

13. Change 350 centimetres to metres.

Find its

14. The temperature of ice was -8°C at 6:30am. By 9:15am, the temperature had dropped by 3°C . What is the new temperature of the ice?
15. Given $k = -2$, $m = 3$, find the value of $k^2 - 2m$.
16. Mazinga scored the following marks in a series of tests; 44%, 55%, 69%, 82% and 27%. Find the range of the scores.
17. Find the next number in the sequence below.
256, 64, 16, 4, _____
18. John had 76 bank notes of Ten thousand shillings. If the serial number of the last note was AX000612, What was the serial number of the first note?

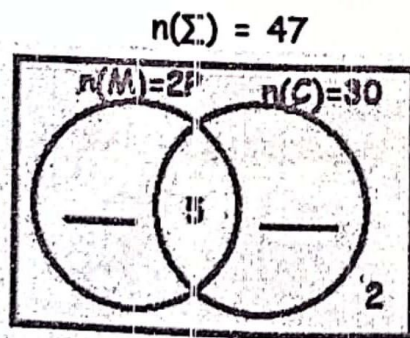
19. Round off 349.998 to the nearest whole number.

20. A parents' meeting which ended at 1:00pm lasted for 2 hours 30 minutes. At what time did the lesson start?

SECTION B (60marks)

21. At a birth day party attended by Forty seven guests, 30 guests were served with **Chicken (C)**, 20 were served with **Meat (M)**, 5 guests were served with both meat and chicken while 2 guests did not eat either of the two dishes.

a) Use the given information to complete the Venn diagram below. (2marks)



b) What is the probability of choosing a guest who ate only one type of dish? (3marks)

22a) Express the recurring decimal 0.3444.....as a common fraction.

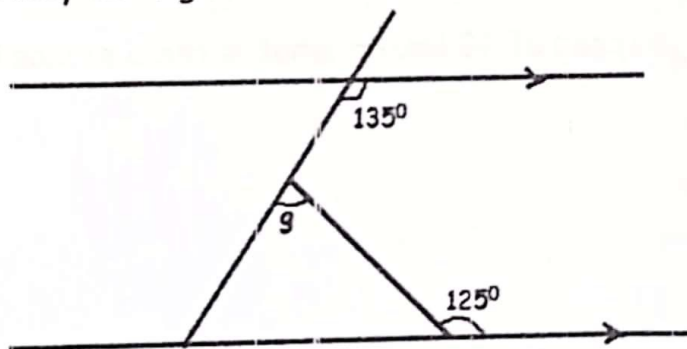
(2marks)

b) Simplify: $\frac{2}{3} \times \frac{1}{4} - \frac{1}{12} \div \frac{1}{2}$

(3marks)

23a) Study the figure below and use it to find the value of g in degrees.

(3marks)



b) The interior angle of a regular polygon is 20% more than the exterior angle. Find the size of the exterior angle.

(3marks)

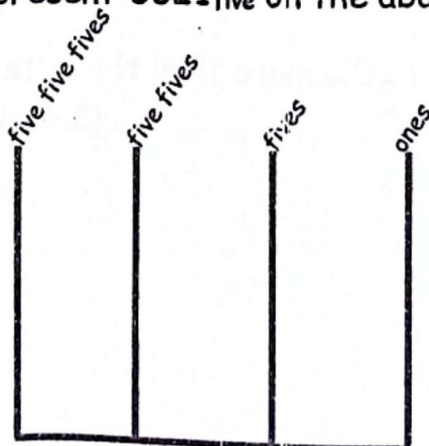
24. The table below shows how a motorcyclist travelled from M to R via towns N and P. Study it carefully and use it to answer questions that follow.

Town	Arrival	Departure
M		09 00 hrs
N	09 30 hrs	09 42 hrs
P	10 35 hrs	11 10 hrs
R	13 30 hrs	

- a) Express his arrival time at R in 12 hour clock. (1mark)
- b) For how long did he stay at P? (2marks)
- c) If he moved at an average speed of 40 km/hr, what is the distance between M and R? (2marks)

25. Represent 3021_{five} on the abacus below

(2marks)



- b) Given that $104_m = 131_{four}$, find the value of the unknown base. (3marks)

26. The table below shows the exchange rates in PJMAX Forex Bureau.

Currency	Buying price	Selling price
Ksh. 1	Ug sh. 36	Ug sh. 38
Us \$	Ug sh. 3650	Ug sh. 3720

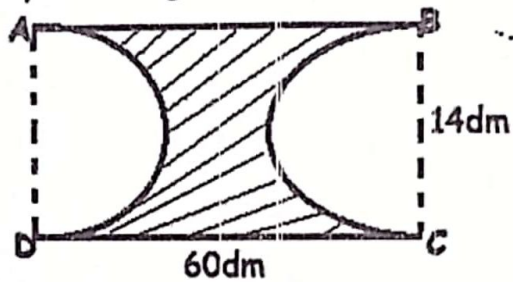
- a) How much in Uganda shillings is Ksh. 1800? (2marks)

- b) A tourist has Us dollar 760, how many Kenya shillings will he get? (3marks)

- 27a) Mark is four times as old as Betty. In 10 years' time Mark's age will be twice the Betty's. How old is the Betty? (3marks)

- b) To each of the numbers 30 and 45, x is added and the ratio of the resulting number is 8:11 respectively. Find the value of x . (2marks)

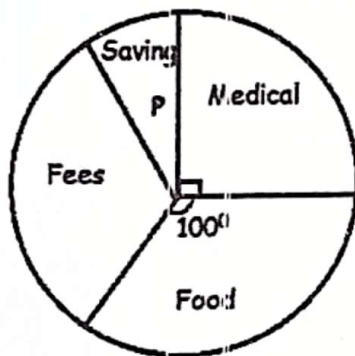
28. Study the diagram below and answer the questions that follow.



- a) Find the perimeter of the figure ABCDA (Use $\pi = \frac{22}{7}$) (2marks)
- b) Work out the area of the shaded part (Use $\pi = \frac{22}{7}$) (3marks)

29. A school spent $\frac{1}{3}$ of its money on salaries and $\frac{1}{5}$ of the remainder on transport. The remaining amount was sh. 400,000. How much money did the school have at first? (5marks)

30. The pie chart below show how a family spends its weekly income of sh. 720,000.



- a) What percentage does the family spend on medical. (2marks)

- b) If the family spends sh. 240,000 on Fees, find the value of P. (2marks)

31. One day, a tank was $\frac{3}{5}$ full of water. When $\frac{4}{9}$ of that water was added, 132 litres were needed to make it full. Find the full capacity of the tank. (5marks)



(2marks)

32. A ship sailed from port K on a bearing of 120° to port M a distance of 300km. it then turned and continued to port N on a bearing of 235° through a distance of 400km.
- a) Using a scale of 1cm to represent 50km, draw the scale diagram to show the journey of the ship. (4marks)

- b) What is the bearing of port N from port K? (1mark)

THE END

6. Re write the verse below 5 times (10marks)

لَا يُؤَلِّفُ
قُرَيْشٌ

.....

.....

.....

.....

.....

.....

END