

THE SIPRO MID-TERM II EXAMINATIONS -2023

PRIMARY SEVEN MATHEMATICS

Time Allowed: 2 Hours 30 Minutes

Index No.

Random No.						Personal No.		

Candidate's Name: _____

Candidate's Signature: _____

School Random No: _____

District: ID: _____

READ THE FOLLOWING INSTRUCTIONS CAREFULLY:

1. This paper has two sections: A and B.
2. Section A has 20 questions (40 Marks).
3. Section B has 12 questions (60 Marks).
4. Attempt all questions in both sections. All answers to both sections A and B must be written in the spaces provided.
5. All answers must be written in blue or black ball point pens or ink. Only diagrams and graph work must be done in pencil.
6. Unnecessary alteration of work will 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:

PAGES	MARKS	INITIALS
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Page 2		
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Page 9		
Total		

Please turn over



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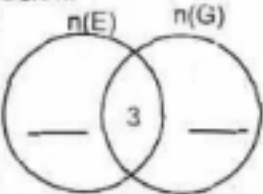
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SECTION: 40 MARKS

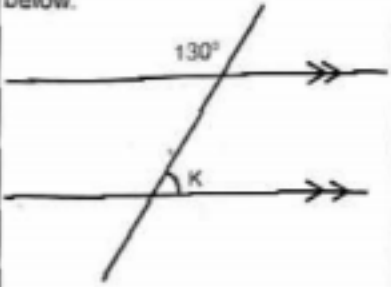
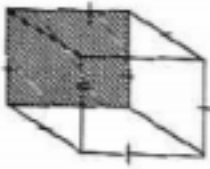
Attempt all questions in this section
Questions 1 to 20 carry two marks each

1.	Work out: $\begin{array}{r} 14 \\ \times 2 \\ \hline \end{array}$	2.	Write XLII in words.
3.	Simplify: $4e-(5-e)$	4.	Express 40cm as a percentage of 2m.
5.	Given that set: $E = \{a, b, c, d, e, f, h\}$ and $G = \{e, c, n, r, k, b, q, w, j\}$ complete the venn diagram below. 	6.	Which number has been prime factorised to get $\{2, 3, 5\}$?
7.	The match started at 11:45am and ended at 1:15pm. How long did the match take?	8.	Rebecca is 3.4 metres tall. What is her height in centimetres ?



9.	Find the probability of getting an odd number from set P. Given that set P = {0,1,2,3,4,5,6,8,9}	10.	Simplify: $3 - 4 = \underline{\hspace{2cm}}$ (mod6)
11.	Sandra has bank notes numbered from EQ004300 to EQ004399. If each note was worth sh.5000 in value, how much money did she have?	12.	Using a ruler, a pencil and a protractor, draw an angle of 130° .
13.	Work out: $\begin{array}{r} 101_{\text{two}} \\ + 11_{\text{two}} \\ \hline \hline \end{array}$	14.	If set W has 32 subsets, how many elements are in set W?



15.	Find the mean of $4r+2, 5, 6$ and 7	16.	Matovu sold a motorcycle at shs. 2,800,000 making a loss of shs. 150,000. What was his cost price?
17.	Solve for h : $h - 6 = 15$	18.	Find the value of k in the figure below. 
19.	12 women can do a piece of work in 5 days. How many women are needed to do the same job in 6 days?	20.	The area of the shaded part below is 25cm^2 . Find its volume. 

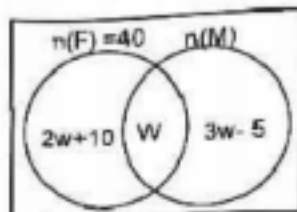


SECTION B: 60 MARKS

Attempt all questions in this section.

Marks for each part of this question are indicated in the brackets

21. Given that 40 pupils like fish (F) and some like meat (M) while W like both sauces as shown in the venn diagram below. Use it to answer the questions that follow.



- a) Find the value of W.

(02Marks)

- b) Find the number of pupils who eat meat.

(02Marks)

- c) Find the total number of pupils in the class.

(02Marks)

22. Noeline was driving a vehicle at a constant speed. She had to cover a distance of 132km in $2\frac{3}{4}$ hours.

- a) Calculate the speed at which she was driving.

(02Marks)

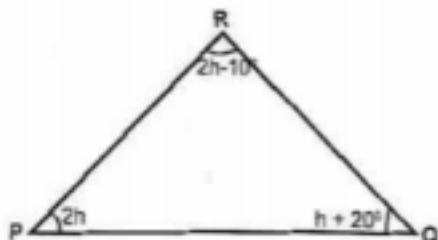


b)	Calculate the remaining distance after driving 2 hours.	
23.a)	Change 1011_{ten} to decimal base.	If $204_y = 112_{\text{ten}}$ Find the unknown base.
24.	<p>Timothy went to the shop and bought the following items:</p> <p>$\frac{1}{2}$kg of rice at sh.5000 each kg.</p> <p>2kg of sugar at sh. 4000 per kg</p> <p>20 oranges at sh. 3000 every 4 oranges</p> <p>1kg of meat at sh. 3500 $\frac{1}{4}$kg each.</p> <p>Calculate his expenditure.</p>	



25. Kiiza scored the following marks in a weekly test 55, 81, 69, 63, 96, 63 and 77
- a) What was his modal mark?
- (01Mark)
- b) Find his median mark.
- (01Mark)
- c) What is the probability that Kiiza scored a mark below his average mark?
- (03Marks)

26. Below is a triangle PQR. Study it carefully and answer the questions that follow.



- a) Find the value of h .
- (03Marks)
- b) Work out the size of angle $\angle PQR$.
- (02Marks)

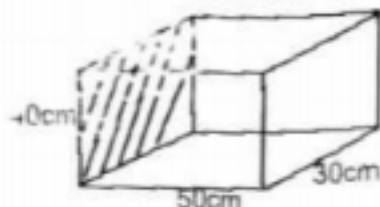


27 a)	<p>Given that $e = 2$ and $k = 4$. Find the value of $3e + 2k$.</p> <p style="text-align: right;">(02Marks)</p>
b)	<p>Jethro is three times as old as Sandra. If their total age is 68 years; How old is Jethro?</p> <p style="text-align: right;">(03Marks)</p>
<p>28. a) Work out: $1\frac{1}{3} - \frac{1}{2}$</p> <p style="text-align: right;">(02Marks)</p>	<p>b) One day, Nisha covered $\frac{1}{2}$ of her journey by taxi, $\frac{1}{3}$ of it using a motorcycle and she walked the remaining 6km. Calculate the total distance she covered.</p> <p style="text-align: right;">(03Marks)</p>



29

Use the rectangular tank below to answer the questions that follow.



- a) Work out the **area** of the shaded part.

(02Marks)

- b) Calculate the amount of water the tank above can hold if it's full in litres.

(03Marks)

30. a) With the help of a ruler, a pencil and a pair of compasses only, construct a triangle PQR in which $PQ = 7\text{cm}$ angle $RPQ = 120^\circ$ and $PR = 5\text{cm}$.

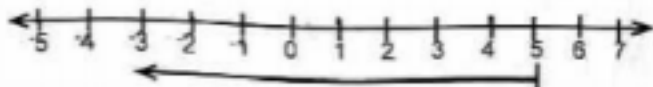
(04marks)

- b) Measure angle RQP.

(01mark)



31. a) On the number line below, draw the remaining two arrows to complete the subtractational statement $-3 - 5 = 8$.



(02marks)

- b) If today is Tuesday, what day of the week was it 67 days ago?

(03marks)

32. a) Express **0.0783** in standard form.

- b) Work out: $(3.5 \times 14) + (3.5 \times 16)$ using distributive property.

(02marks)

(02marks)

