THE SIPRO MID-TERM II EXAMINATIONS -2023
PRIMARY SEVEN MATHEMATICS

Time Allowed: *2 Hours 30 Minutes*

	Random No.					Personal No.		
Index 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"**

Please turn over

SEMAS | Simplified Learning Today
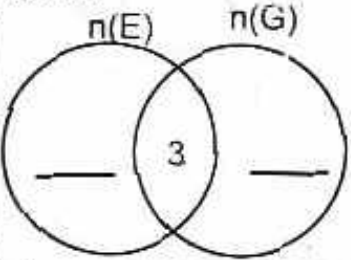
SECTION: 40 MARKS

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

1.	**Work out:** $\begin{array}{r} 1\quad4 \\ \times\quad2 \\ \hline \\ \hline \end{array}$	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. n(E)　　　n(G) 3	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 = $_____ (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:** $\begin{array}{r} 1\ 0\ 1_{two} \\ +\ 1\ 1_{two} \\ \hline \end{array}$	14.	If set **W** has **32** subsets, how many elements are in set **W**?

| 15.	Find the mean of $4r+2,5,6$ and7	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 the 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 question that follow.*

$$n(F) = 40 \qquad n(M)$$

$$2w+10 \quad | \quad W \quad | \quad 3w-5$$
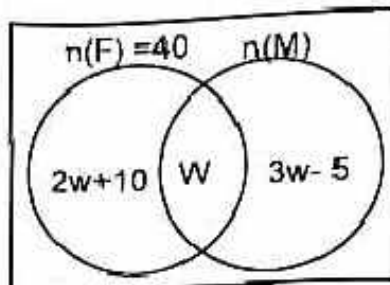
a) Find the value of **W**.

(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.

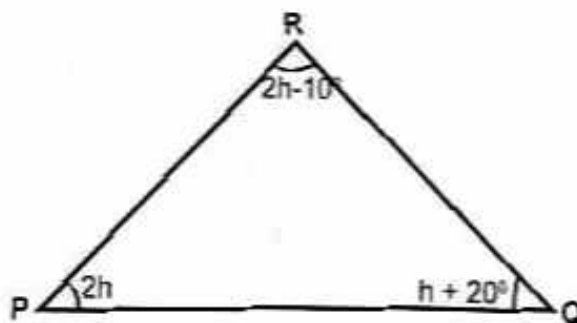**a)** Calculate the **speed** at which she was driving.

(02Marks)

b)	Calculate the **remaining** distance after driving **2 hours.**
	(03Marks)

23.a)	Change **1011**$_{two}$ to decimal base.	If 204$_y$ = 112$_{four}$ Find the **unknown** base.
	(02Marks)	(03Marks)

24.	Timothy went to the shop and **bought** the following items:
	$\frac{1}{2}$kg of rice at **sh.5000** each kg.
	2kg of sugar at **sh. 4000** per kg
	20 oranges at **sh. 3000** every 4 oranges
	1kg of meat at sh. 3500 $\frac{1}{4}$kg each.
	Calculate his expenditure.
	(05Marks)

|	
25.	Kiiza scored the following marks in a weekly test 55,81,69,63,96,63 and 77
a)	What was his **modal mark**?
	(01 Mark)
b)	Find his **median mark**.
	(01Marks)
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 RPQ.
	(02Marks)

27 a)	Given that e = 2 and k = 4. Find the value of 3e + 2k.	
		(02Marks)
b)	Jethro is **three** times as old as Sandra. If their total age is **68** years; How old is Jethro?	
		(03Marks)

28, a) Work out: $1\frac{1}{3} - \frac{1}{2}$	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.
(02Marks)	(03Marks)

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

40cm

30cm

50cm
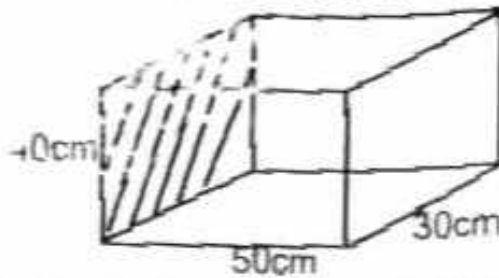
a)	Work out the **area** of the shaded part.	b)	Calculate the amount of water the tank above can hold if it's full in litres.
	(02Marks)		(03Marks)

30. a) With the help of a ruler, a pencil and a pair of compasses only, construct a triangle PQR in which PQ =7cm angle RPQ = 120⁰ and PR = 5cm.
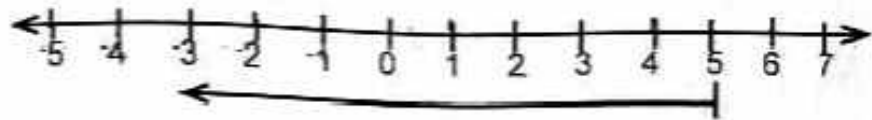
(04marks)

b) Measure angle RQP.

(01mark)

31. a) On the number line below, draw the remaining two arrows to complete the subtractional 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.

(02marks)

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

(02marks)