THE SPECTRUM EXAMINATIONS HUB

Beginning of Term Two Assessment -2025

P.7 Mathematics

Time Allowed: 2 hours 30 minutes

Index number										

NAME: _____**STREAM**_____

SCHOOL_____

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. Answer all questions. All the working for both sections A and B must be shown in the spaces provided.

5. All working must be done using a blue or blackball point pen or ink. Any work done in pencil will NOT be marked except drawings and diagram.

6. No calculators are allowed in the examination.

7. Unnecessary changes in your work and handwriting that cannot be easily read may lead to loss of marks.

8. Do not fill anything in the table indicated; "For examiners' use only" and the boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn. No.	**MARK**	**EXR'S**
1 - 5		
6 – 10		
11 – 15		
16 – 20		
21 – 22		
23 – 24		
25 – 26		
27 - 28		
29 - 30		
31-32		
TOTAL		

Turn over

SECTION A (40 MARKS)

*Answer **all** questions in this section.*

1- Workout: 101 + 19

2- Given that set P = (R, A, T). List the subsets of set **P**.

3- A dice is rolled once. What is the probability that a factor of 5 will show on top?

4- Round off 9.75 to the nearest whole number.

5- Find the next number in the sequence;

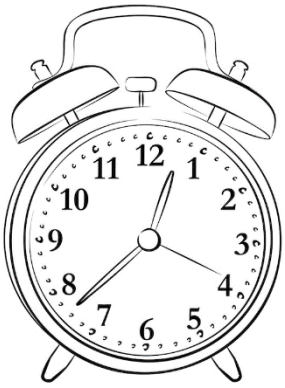
42, 40, 37, 32, 25, _____

6- Solve for k; 17 – 2k = 1

7- Workout: 2 – 5(finite 7)

8- Change 3500 grammes of sugar into kilogrammes.

9- State the time on the clock face below using Roman numerals.



10- Work out (315 x 15) + (17 x 315)

11- Given that 1US dollar costs Ug.sh. 3500. How many US dollars will one get from Ug.sh. 105000?

12- Ouma left his home for school at 7:05am. He covered a certain part of the journey while running and the rest of the journey while walking. He took 35 minutes running and reached school 5 minutes to eight in the morning. How many minutes did he take to cover the rest of the journey while walking?

13- Workout: $3\ 1\ 2_{five}$

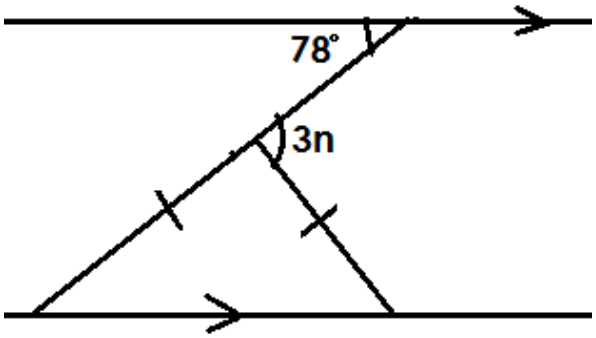
$-\ 1\ 0\ 4_{five}$

14- Given that the cost of a party dress is sh.75,000. How many party dresses will Kamuhinde buy with sh.225,000?

15- The number of candidates in P.7 this year in our school increased by 5% to 21 candidates. How many candidates were in P.7 last year?

16- Simplify: $\frac{5}{12} + \frac{1}{12}$

17- Find the value of ***n*** in the figure below.



18- Kapalaga was asked to group 24 books and 30 pens. Find the largest number of groups of pens and books he got.

19- Given that  represent 120 nursery kids. How many pictures will represent 300 nursery kids?

20- Express 5 metres per second as kilometres per hour.

SECTION B (60MARKS)

*Answer **all** the questions in this section.*

21- The sum of 3 consecutive odd numbers is 69. If the number after the third number is h. Find all the numbers. ***(4mks)***

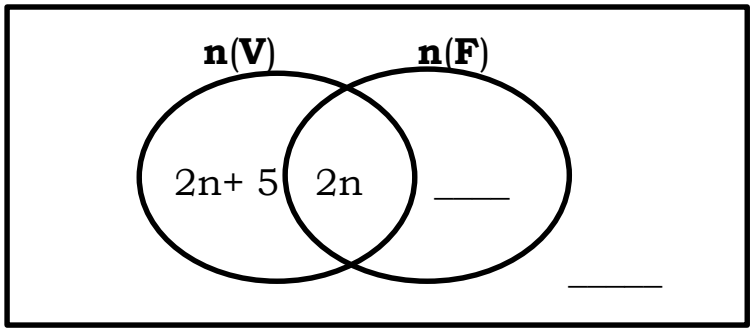
22- (a) Given that $14_p = 13_{ten}$. Find the value of p ***(2mks)***

(b) Convert 42_{five} into a decimal base. ***(2mks)***

(c) Write the place value of 3 in 134_{five} ***(1mk)***

23- In a class of 56 pupils, (2n +5) pupils play football (**F**) only, (3n – 15) play volleyball (**V**) only, 2n play both football and volley ball while the number of pupils who do not play any of the two games was twice the number of those who play both games.
Use the above information to complete the Venn diagram below.

$n(\mathcal{E}) = 56$ ***(2mks)***



(a) Fin the value ***n***. ***(2mks)***

(c) How many pupils play only one type of game? ***(2mks)***

24- A trader bought 3 cartons of salt at sh.22,000 each carton. He sold each packet at sh.700. How much profit did the trader make after selling all the 3 cartons of salt if each carton contained 40 packets? ***(6mks)***

25- (a) Simplify: $\frac{5}{6} - \frac{1}{2} \div \frac{2}{3}$ ***(3mks)***

(b) Workout: $\frac{0.24 \times 0.6}{0.4}$ ***(2mks)***

26- Roshan went to a mobile money agent and withdrew sh.105,000 from her MTN line and sh.30,000 from her Airtel line. After the two withdrawals, she went to the shop and bought the following items.

- 2kg of cassava flour at sh.7,500 @ kg
- 2 tubes of toothpaste at sh.7000 each tube.
- A tablet of bathing soap at sh. 3500.
- A tray of 30 eggs at sh.400 per egg.

(a) Calculate her total expenditure. ***(4mks)***

(b) How much did she take home after buying the above items?

(2mks)

27- Given that p = 5, q = r + 1 and r = p – 2

(a) Evaluate pq + pr ***(2mks)***

(b) If $\frac{2}{3}$ (n+1) = $\frac{1}{2}$(n + 2) Find the value of n ***(3mks)***

28- The mean age of a family of four people is 24 years. The fathers' age is 38 years and the mother is 4years younger than the father. How old is the son if he is 2 years older than the daughter? ***(4mks)***

29- A motorist drove from town **A** at 7:00am driving at a speed of 60km/h for 40minutes. He rested at town **B** for 30 minutes and then continued to town **C** using twice the speed used from town **A** to **B** for 30 minutes.

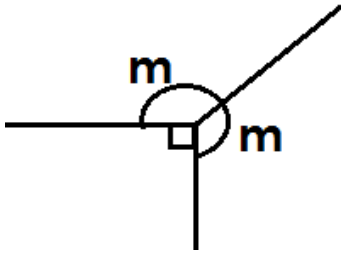
(a) Calculate the distance from **A** to **B**. ***(2mks)***

(b) At what time did the motorist reach town **C**? ***(2mks)***

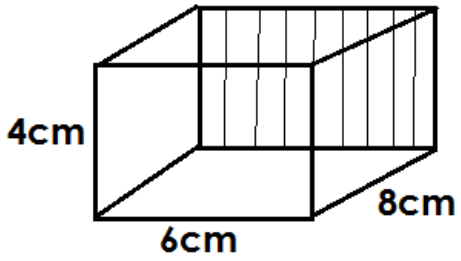
(c) Calculate the total distance from town A to town **C**? ***(2mks)***

30- (a) Find the complement of $(p - 20)^0$ ***(2mks)***

(b) Find the value of ***m*** in the figure below in degrees. ***(2mks)***



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



(a) Calculate the area of the shaded face. ***(2mks)***

(b) Find the total length of all the edges of the above shape. ***(2mks)***

(c) Find the number of vertices for the above shape. ***(1mk)***

32- Using a pair of compasses, ruler and a pencil only,

(a) Construct triangle **ABC** where **AB** = **BC** = **AC** = 8.0cm ***(3mks)***

(a) Bisect angles **ABC** and **BAC** and let the bisectors meet at point *O*. ***(2mks)***

(c) Measure angle **A***O* **B** _____ ***(1mk)***

END