THE PEARL EDUCATIONAL CONSULT KAMPALA SCHOOLS

P.7 PRE-REGISTRATION SET THREE-2024

MATHEMATICS

Time allowed: 2hours 30 minutes

Random No.						Personal No.		

Candidate's Name: .....

Candidate's Signature: .....

District ID No.

Read the following instructions carefully:

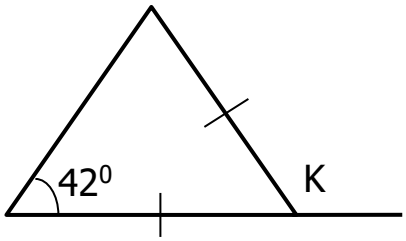
1. Do not write your **school** or **district name** anywhere on this paper.
2. This paper has two sections: **A** and **B**. Section **A** has **20 questions** and **section B** has **12 questions** .This paper has **12 pages** printed altogether.
3. Answer **all** questions. All the working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** working **must** be done using a **blue** or **black** ball point pen or ink. Any work done in pencil other than graphs and diagrams will **not** be marked.
5. **No calculators** are allowed in the examination room.
6. Unnecessary **changes** in your work and handwriting that cannot be easily read may lead to **loss of marks.**
7. Do not fill anything in the table indicated **"For Examiners' use only"** and the boxes inside the question paper.

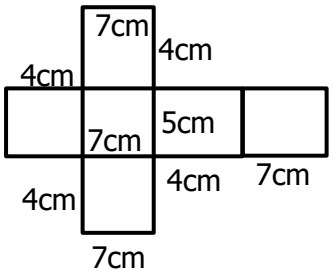
FOR EXAMINERS' USE ONLY		
Qn. No.	**MARKS**	**EXR'S No.**
1- 5		
6 -10		
11- 15		
16 – 20		
21 – 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		
TOTAL		

Turn Over

SECTION A (40 MARKS)

(***Each question in this section carries two marks***.)

1.	Subtract 8 from 14.8	2.	Workout: $14 - 5 \times 2 + 2^3$
3.	Simplify: $^{-}4 + {}^{-}6$	4.	Given that M = {e, m, f, g} and N = {h, f, m, d} Find n(M – N)'
5.	Given that p = 3 and q = 2. Find the value of 2pq.	6.	Round of 79.999 to one decimal place.
7.	Find the multiplicative inverse of $2\frac{1}{3}$	8.	Write $(5 \times 10^3) + (2 \times 10^1) + (7 \times 10^{-1})$ in short form.
9.	**Find the value of angle k in the diagram below.** 	10.	The cost of 3 mathematical sets is sh. 21,000. Find the cost of 7 similar mathematical sets.
11.	Find the sum of the next two numbers in the sequence: 1, 3, 6, 10, _____, _____	12.	Solve for w, $2^w - 1 = 7$

13.	Calculate the mean of 2p – 1, 5, p + 2 and p – 2	14.	A forty-minute lesson ended at 9:20am. At what time did the lesson start?
15.	Change 1.5 litres into cubic centimetres.	16.	The lowest common multiple (LCM) of two numbers m and 12 is 36 and their greatest common factor (GCF) is 6. Find the value of m.
17.	Find the complement of $(120^0 - W)$	18.	When $\frac{1}{4}$ is removed from a number, the result is $\frac{5}{12}$. Find the number.
19.	Musana will celebrate his birthday in 27 days from today. If today is a Friday. What day of the week will he celebrate his birthday?	20.	The net below was carefully folded to form a certain figure. Find the volume of the figure formed by the net. 

SECTION B

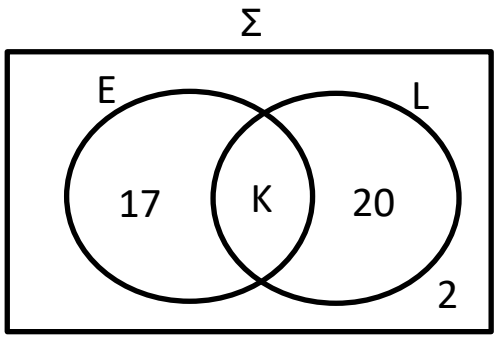
*Answer **all** questions in this section (Marks for each question are indicated in brackets)*

21. (a) Change 1011_{two} to standard base ***(02marks)***

(b)Workout: $431_{five} - 24_{five}$ ***(02marks)***

(c)Write the value of 3 in 4321_{six} ***(02marks)***

22. The Venn diagram below shows the number of pupils who speak English and Luganda. Study it carefully and use it to answer the questions that follow.



(a) If those who speak English are equal to those who speak Luganda only, find the value of k. ***(02marks)***

b) How many pupils are in the class altogether? ***(02marks)***

c) Find the probability of choosing a pupil at random who speak other language. ***(01mark)***

23. (a) Workout: $\frac{1.8 \times 1.2}{0.9 \times 0.04}$ ***(03marks)***

(b) Workout: $1\frac{1}{2} - \frac{1}{4} + \frac{2}{3}$ ***(03marks)***

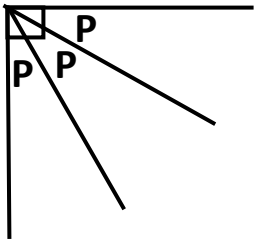
24. Lubuulwa had notes of sh. 10,000 each numbered consecutively from CY0248041 to CY0248090.

a) How many notes did he have? ***(02marks)***

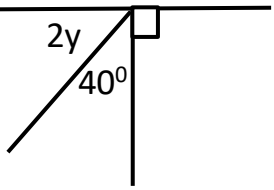
b) How much money did Lubuula have altogether? ***(02marks)***

25. **Find the value of the unknown angles.**

a) ***(02marks)***



b) ***(02marks)***



26. The sum of the three consecutive multiples of 2 is 30. Find three multiples of 2. ***(04marks)***

27. (a)Solve for m; $\frac{12}{m} = 3$ ***(02marks)***

(b) Nakitto is twice as old as Kabuye. If their total age is 42 years. How old is Nakitto? ***(03marks)***

28. Bakali got a loan from a saving group of sh.120,000 at an interest rate of $5\frac{1}{2}$% per month for 4 months.

a) Calculate the interest he paid at the end of the 4 months. ***(03marks)***

b) How much amount did he pay at the end of the 4 months? ***(02marks)***

29. Mubiru went to the market and bought the following items as shown in the price list below.

- 2kg of rice at sh. 2,500@kg.
- 1 ½ litre of milk at sh.2,000 per litre.
- 18 mangoes at sh. 1,000 every 3 mangoes.

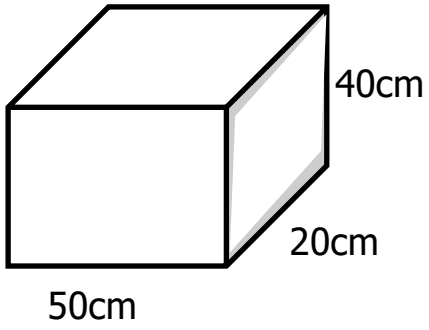
(a) Calculate his total expenditure. ***(04marks)***

(b) If he was given a balance of sh. 1,000, how much money did he go with to the market? ***(02marks)***

30. A motorist left Iganga driving at a steady speed of 80km/hr for 1 ½ hours. He then changed his speed to 66km/hr and covered the remaining journey of 132km. Calculate his average speed for the whole journey. ***(04marks)***

31. Below is a rectangular cuboid made out of a wire. Study it carefully and use it to answer the questions that follow.

a) Find the total length of the wire used to form the shaded face. ***(02marks)***



b) If all the open faces were closed such that it can be used to hold water, calculate the capacity of water it can hold when completely full of water.

32. **The table below shows the number of candidates in a certain school who passed in different grades. Use it to draw an accurate pie -chart of diameter 7cm.**

DIVISION	DIV 1	DIV 2	DIV 3
NUMBER OF CANDIDATES	24	30	6

(05marks)

****END***