SIR APOLLO KAGGWA SCHOOLS - SINCE 1996
PLE PREP TEST VIII (PRE-PLE) TERM 3 2022
PRIMARY SEVEN
MATHEMATICS

Time allowed: 2 hours 30 minutes

Index No.	EMIS NO.						Personal No.			

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		

SECTION A (40 MARKS)

Answer all the questions in this section

Question 1 to 20 carry two marks each.

1. **Work out:** 449
   − 136
   ———

2. Round off **3962** to the nearest hundreds.

3. Given that **set Q = { 1 , 2 , 3}**. List down all the subsets of set **Q**.

4. **Simplify:** $\frac{5^2 \times 5^3}{5^4}$

5. Find the next number in the sequence.

   29, 28 , 26 , 22 , 14 , _____

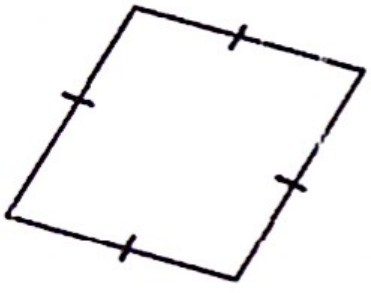
6. Write 608 in Roman Numerals.

7. Work out: 4 - 5 (finite 7)

8. Write a single number for 9.68×10^{-2}

9. 4 cakes cost sh. 8000. Find the cost of a half a dozen of similar cakes.

10. How many lines of symmetry has the figure below?



11. Given that $a = 5$, $b = 2$ and $c = -3$. Find the value of $a - bc$.

12. How many kilograms are in 750gm of sugar?

13. Duncan bought 2 watches at sh. 86,000 and sold each at sh. 45,000. Find the profit he made.

14. Bilal works from 08 45hrs to 15 18hrs. Calculate the time he spends working.

15. Express 0.2333.....as a simplified common fraction.

16. The temperature of a day reduced by 4^0C at night from 29^0C during day time. Find the temperature at night.

17. Using divisibility test for 9, which of the following numbers is divisible by 9;

    6135, 5436 and 4278.

18. The probability of choosing a girl from a class of 72 pupils is $\frac{5}{9}$. Find the number of boys in the class.

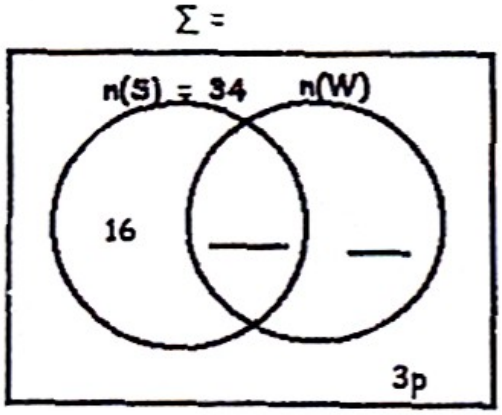
19. The LCM of two numbers is 36 and their GCF is 6. If one of the numbers is 12. Find the second number.

20. Using a ruler and a pair of compasses, construct a perpendicular bisector of the line segment TV below.

SECTION B

21. At a party, 34 guests took Soda(S) , 15 guests took Water (W) only, 3p did not take any drink at all while 33 guests did not take soda.

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



b) Find the value of P. (2marks)

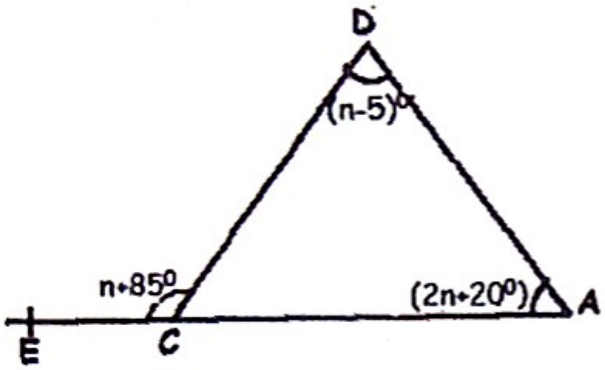
c) Work out the total number of people who attended the party. (2marks)

22a) Convert 143_{five} to base ten. (2marks)

b) Given that $40_k = 1100_{two}$, find the value of k. (3marks)

23. A motorist drove his car at a speed of 54km/hr for 4 hours and 30 minutes. Calculate how long the return journey took him if he travelled at an average speed of 108km/hr. (4marks)

24. Study the triangle below carefully and use it to answer the questions that follow.



a) Find the value of n. (2marks)

b) Work out the size of angle DCA. (2marks)

25a) Solve: $\frac{2d-2}{4} = \frac{d+1}{3}$ (3marks)

b) Solve and state the first two values of the solution set for $8 > 12 - 2g$. (3marks)

26. A ship sailed from Port A 500km to Port B on a bearing of 090°. From B, it sailed from 600km to Port C on a bearing of 230°.

a) Draw a sketch diagram showing the three Ports. (1mark)

b) Using a scale, 1cm represents 100km, draw an accurate figure showing the 3 ports. (4marks)

c) Find the bearing of Port A from Port C. (1mark)

27. A dairy farmer sells milk using cylindrical containers of radius 10cm and height 14cm. on a certain day, he received sh. 600,000 from his sales. Find the number of litres he sold that day if each container was sold at sh. 7500 (Take π as $\frac{22}{7}$)

(5marks)

28. The table below shows the rates at which different currencies are bought and sold in a forex bureau. Study it and answer the questions that follow.

Currency	Buying price	Selling price
1 Us dollar (USD)	UGx 3650	UG x 3680
1 pound sterling (GBP)	UGx 4700	UGx 4800
1 Kenya shilling (KES)	UGx 36	UGx 38

a) A lady had UGx 1,104,000. How many US dollars did she get from the bureau?

(2marks)

b) A television set costs KES 20,000. Find the cost of the same television in pound sterlings.

(3marks)

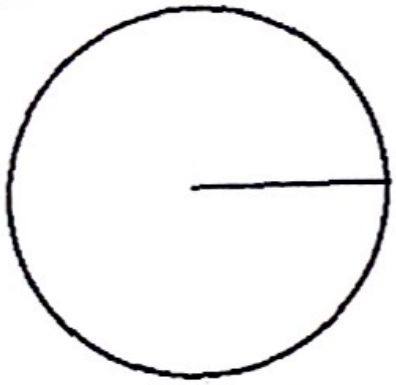
29. In a class, $\frac{3}{4}$ are girls and the rest are boys. $\frac{1}{4}$ of the girls are less than 12 years.

a) Find the fraction of the girls above 12 years.

(2marks)

b) If all the boys are above 12 years and the class has 52 pupils above 12 years. How many pupils are in the class? (3marks)

30. The diagram below shows a circular recreation ground.



If the recreation ground above was fenced off using 44 concrete pillars at intervals of 5 metres.

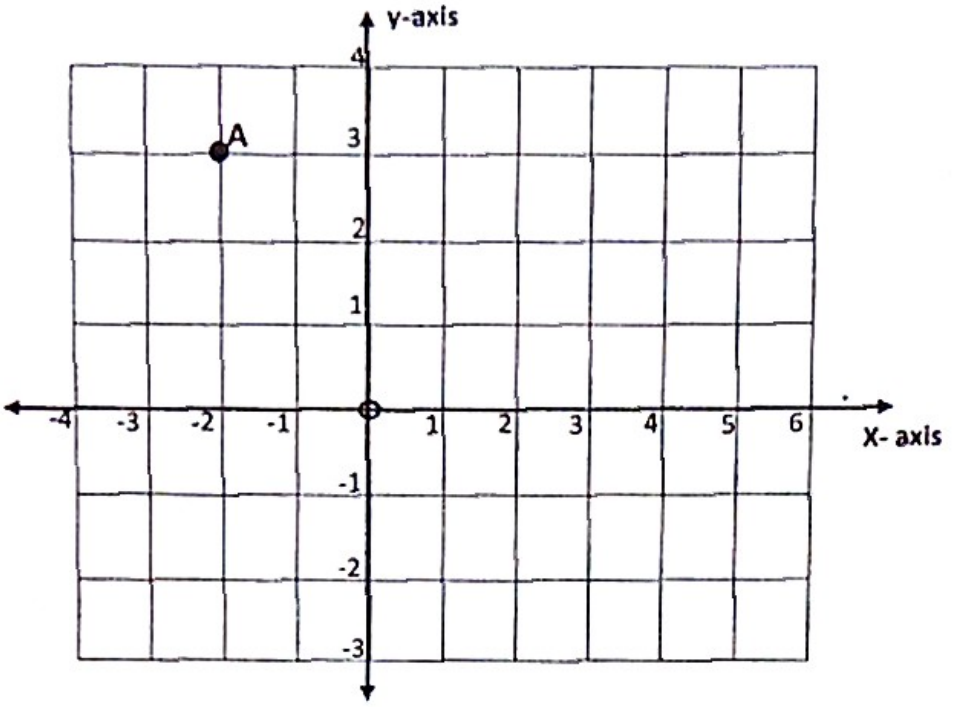
a) Find the radius of the recreation ground. (02marks)

b) Work out the area of the recreation ground. (2marks)

31a) Work out: $\frac{3.4 - 1.6}{0.02 \times 0.03}$ (3marks)

b) Arrange $\frac{2}{5}$, $\frac{1}{4}$ and $\frac{1}{2}$ in ascending order. (2marks)

32. Use the coordinate graph below to answer the questions that follow.



a) Write the coordinates of point A. (01mark)

b) Plot the points B($^{-}2$, $^{-}2$) and C (4 , 0) (02 marks)

c) Join A to B, B to C and C to A. (1mark)

d) Find the area of the figure formed. (1mark)

THE END