NAMAGUNGA PRIMARY BOARDING SCHOOL

PRE- PLE REGISTRATION EXAMINATION - SET 1

PRIMARY SEVEN - MATHEMATICS (2024)

Time allowed: 2 Hours 30 Minutes

Candidate's Name: .....

Date: ..... **Stream:** .....

Read the following instructions carefully:

1. This paper has **two** Sections: **A** and **B**.
2. All the working for both sections A and B must be shown in the spaces provided.
3. All working must be done using a blue or black ball point pen or fountain pen. Any work done in pencil other than graphs, pictures and diagrams will not be marked.
4. No calculators are allowed in the examination room.
5. Unnecessary changes of work may lead to loss of marks.
6. Any hand writing that cannot easily be read may lead to loss of marks.
7. Do not fill anything in the boxes indicated "**For Examiner's Use Only**".

SECTION	EXAMINER'S MARKS	T/L MARKS
A		
B		
TOTAL		

FOR EXAMINER'S USE ONLY		
QN. NO	MARKS	SIGN
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

SECTION A (40 marks)

1. Work out 4×3 using repeated addition .

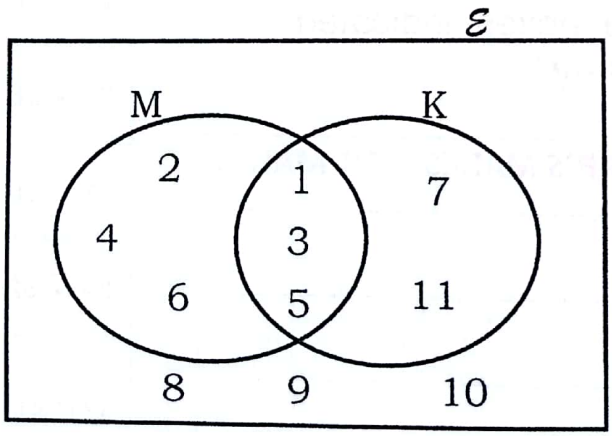
2. Write 129·96 in words without using the word "point".

3. Simplify: $-15 - 7$

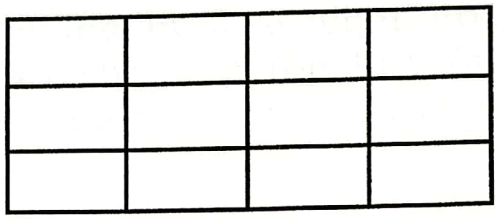
4. Find the next two numbers in the sequence below.

   3 , 4 , 8 , 17 , 33 , _____ , _____

5. Study the Venn diagram below and use it to find $n(K)^c$.



6. If  represents 60 tomatoes. Draw pictures to represent 330 tomatoes.

7. Shade 25% of 

8. Divide 6,363 by 7

9. Given that $\pi = \frac{22}{7}$ and radius = 7cm ,

find the value of $\frac{1}{2}\pi d + d$

10. The cost of 3 textbooks is sh. 45,000 . What is the cost of half a dozen of textbooks ?

11. Work out the square root of 225 .

12. If $a = 6$, $b = 4$ and $c = 10$, find the value of $(ab) + (bc)$

13. Express 25m/sec as km/h

14. A crate of beer contains 25 bottles each of 500ml. Work out the number of litres contained in a crate of beer.

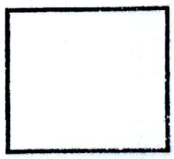
15. Using a ruler, a sharp pencil and a pair of compasses only, construct an angle of 30°.

16. Nakku was standing in a straight line with other girls at the assembly and she was the 9th from either side.
Work out the number of pupils who were in that line.

17. Set P = {last five letters of English alphabet}
Work out the number of proper subsets of set P.

18. John the Baptist was born in 35BC and he died in 42AD.
How old was he by the time he died ?

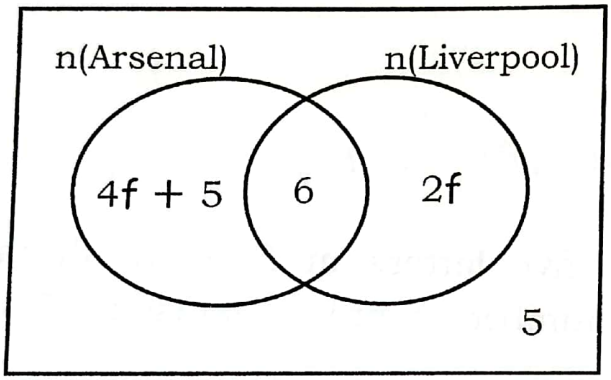
19. Work out: $3 + 8 - 9 = \_\_\_\_ \pmod{10}$ using the dial .



20. Express 24:36 as a simplified fraction .

SECTION B (60 MARKS)

21. The Venn diagram below shows the number of football fans in a certain village who support different teams in English Premier League.



If 27 football fans support Arsenal;

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

(b) How many football fans are in that village altogether ? (2 marks)

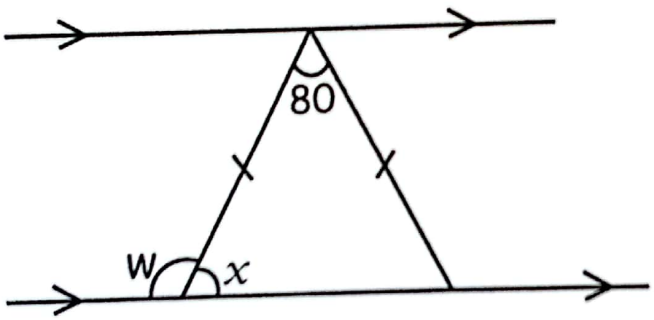
(c) Find the probability that the football fan selected did not support any of the two mentioned teams. (1 mark)

6

22(a) Convert 24_{five} to base three. (3 marks)

(b) Work out the value of the unknown base in: $100_{m} = 25_{ten}$ (2 marks)

23. Study the diagram below carefully and attempt the questions about it.

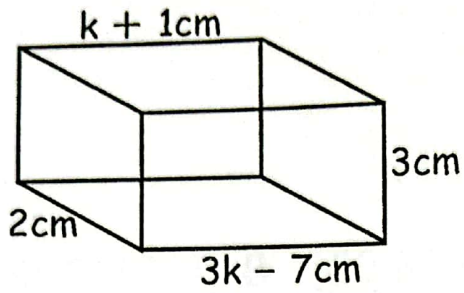


Find the value of ;

(i) x (2 marks)

(ii) W (2 marks)

24. Below is a rectangular prism. Use it to answer the questions that follow.



(a) Work out the value of k. (2 marks)

(b) Find its;

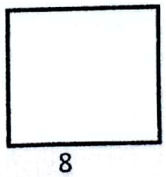
(i) volume (2 marks)

(ii) T.S.A (2 marks)

25. The sum of the three consecutive natural numbers is 36.

(a) Find those natural numbers. (3 marks)

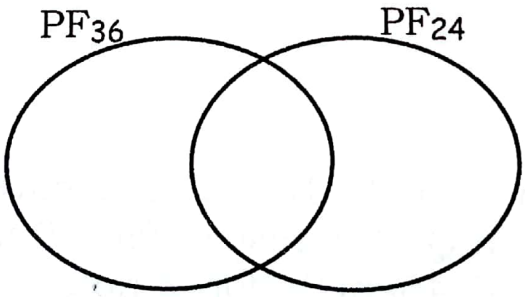
(b) Calculate their range. (1 mark)



26(a) Change $\frac{5}{9}$ to a decimal. (2 marks)

(b) Simplify : $\frac{0{\cdot}36 - 0{\cdot}24}{0{\cdot}02}$ (3 marks)

27(a) Prime factorise 36 and 24 and represent their prime factors on the Venn diagram below. (5 marks)



28. At a given day in Uganda, the exchange rates of some currencies were as follows.

Currency	Buying rate	Selling rate
K.sh. 1	U.sh. 35	U.sh. 36
US ($) 1	U.sh. 3,560	U.sh. 3,600
£ 1	U.sh. 4,800	U.sh. 4,850

(a) Jackline had K. sh. 250, how much money in Uganda shillings did she get after exchanging ? (2 marks)

(b) Sarah came from London with 240 pounds and exchanged them for US dollars. How many US dollars did she get from the forex bureau ? (2 marks)

29. A cyclist left town P at 10:15a.m and covered 90km at a speed of 60km/h to town Q . He rested for 30 minutes and continued to R at a speed of 45km/h for 3 hours.

(a) At what time did he reach town Q ? (2 marks)

(b) Work out the cyclist's average speed for the whole journey.
(3 marks)

30(a) With the help of a pair compasses and a ruler, construct triangle PLE in which line PL = 6cm , angle PLE = 60° and ∠LPE = 45°.
(4 marks)

(b) Measure line PE
(1 mark)

31. In a village of 450 people, $\frac{3}{5}$ are males and the rest are females. If $\frac{2}{3}$ of the males are above 18years and $\frac{1}{4}$ of the females are below 18 years.

(a) Find the total number of people below 18 years of age. (4 marks)

(b) Calculate the ratio of males to females. (2 marks)

32. The table below shows the mass of different children recorded in a class. Use it to answer the questions about it.

Mass in kg	35	65	30	45
No. of children	2	1	4	3

(a) Find their modal mass . (1 mark)

(b) Work out their median mass. (2 marks)

(c) How many children measured above the average mass ? (3 marks)

END