THE PRIME EXAMINATIONS 2024

P.7 END OF TERM II

MATHEMATICS (New Curriculum)

Time allowed 2 hours 30 minutes

INDEX 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. The paper has 9 printed pages.
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 easily be read may lead to loss of marks.
7. Do not fill anything in the table indicated "For Examiners' use only", and those boxes inside the question paper.

FOR EXAMINER'S USE ONLY

QUESTION NUMBER	MARKS ATTAINED	INITIALS
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

APPROVED:
Consultant
Mathematics Department (PEC)

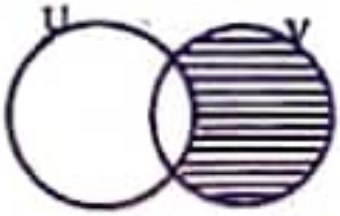
Section A (40 Marks)

1. Work out: 32 + 2

2. Show 324 on the abacus below.

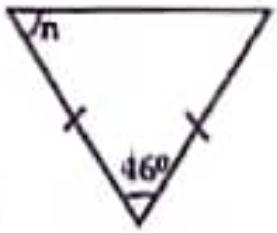
3. Work out: 3 + 4 = ____ (finite 6)

4. Describe the shaded region in the Venn diagram below.



5. Work out: $\frac{2}{3} - \frac{1}{2}$

6. Find the value of n.



7. Work out: ·3 - ·5

8. Use the distributive property to work out: (6.57 x 175) – (75 x 6.57)

9. Solve: 4(p -2) =0

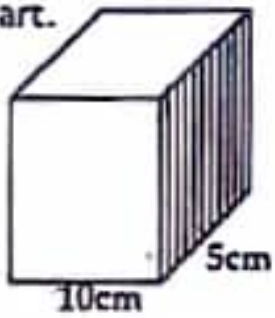
10 In the space below, construct an angle of 135°.

11 Write 785.4 in scientific notation.

12 Namyalo bought 4 pens at sh 3200. Find the amount she paid for $1\frac{1}{2}$ dozens of pens.

13 What number has been expanded to give; $(4\times10^{2}) + (7\times10^{0}) + (2\times10^{-1})$?

14 A mango tree was planted in a line of orange trees. If it was the 23rd from either side, find the number of orange trees in the line.

15	Work out the mean of p, p + 1, p + 2, p + 3 and p + 4.	16	In a class of 60 pupils, 70% of the pupils cleared fees and the rest didn't. How many pupils haven't cleared fees?
17	Express 0.1818... as a common fraction in its lowest form.	18	Solve for p: $2^{3p} \times 4 = 256$
19	The volume of the cuboid below is 400cm³. Work out the area of the shaded part. 		
20	A rectangular hole measuring 18m by 12m is to be covered by square tiles. Find the greatest number of tiles that will cover the room without leaving any remainder.		

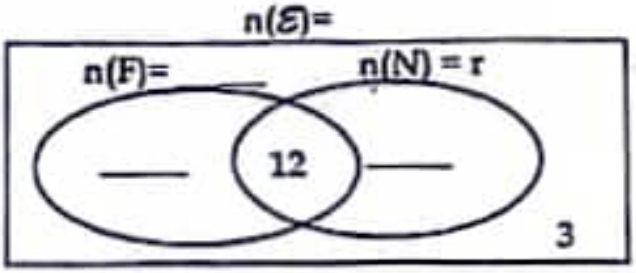
Section B (60 Marks)

21 (a) Simplify: $\frac{0.16 \times 3.6}{-0.13 + 0.11}$ *(03 marks)*

(b) Express $\frac{3}{11}$ as a recurring decimal. *(02 marks)*

22 In a class, 20 pupils like football (F) only, r pupils like Netball (N), 12 pupils like both Football and Netball while 3 pupils like none of the two types of games.

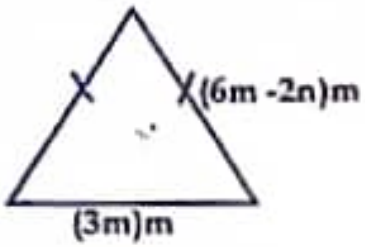
(a) Use the above information to complete the Venn diagram below. *(03 marks)*



(b) If 17 pupils don't like Football at all, find the number of pupils who like Netball. *(02 marks)*

(c) How many pupils are in the class? *(01 mark)*

3 (a) Work out the perimeter of the triangular field below given that m =4 and n =2. *(04 marks)*

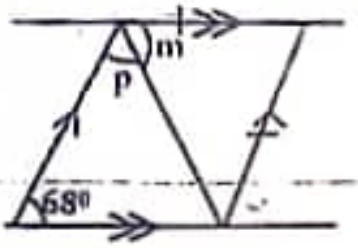


(b) If poles are planted at our interval of 4m around the triangular garden, find the poles planted. *(02 marks)*

4 (a) The sum of 4 consecutive even numbers is 132. Find the numbers if the largest number is y. *(02 marks)*

(b) Find their range. *(02 marks)*

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



(a) Find the value of m. (02 marks

(b) Find the value of p. (02 marks

26 By selling an item at sh 77000, a trader realised a profit of 10%.

(a) Find the price at which he bought the item. (02 mark

(b) At what price must he have sold in order to realise a loss of 10%? (02 mark

The cost of a bar of soap is eleven times the cost of a kilogram of salt and the cost of a litre of milk is four times the cost of a kilogram of salt, if their total cost is sh 8000.

(a) Find the cost of a kilogram of salt. *(03 marks)*

(b) Find the cost of 2 litres of milk. *(02 marks)*

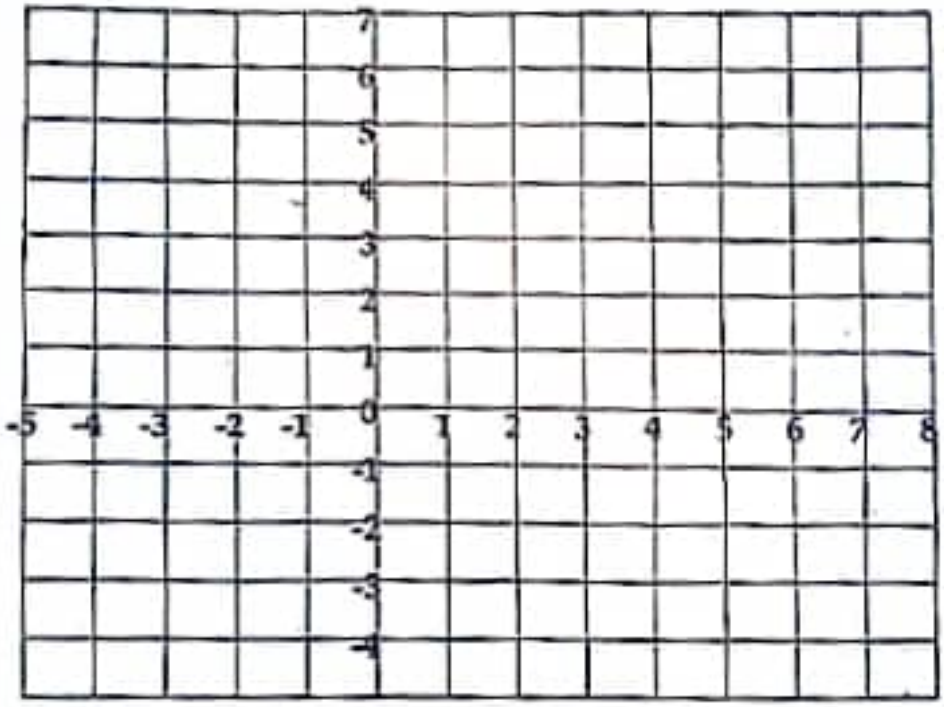
Nambatya covered a distance of 900m in 30 seconds.

(a) Calculate her speed in km/h. *(03 marks)*

(b) If Nambatya continued at the same speed for 3 hours, what distance would she cover? *(02 marks*

27 (a) Plot the following points on the grid below. *(03 marks)*

A(-3,3), B(-1,6), C(5, 3) and D(-1,0)



(b) Join points A to B, B to C, C to D, and D to A. *(02 marks)*

(c) Name the polygon formed. *(01 mark)*

28 (a) Work out: $^{+}5 - {}^{-}3$ using a number line. *(03 marks)*

(b) Given that $a = {}^{-}2$, $b = {}^{-}3$, find the value of $2a - 3b$. *(02 marks)*