NAMAGUNGA PRIMARY BOARDING SCHOOL
BEGINNING OF TERM III EXAMINATION, 2022
PRIMARY SEVEN - MATHEMATICS

Time allowed: 2 Hours 30 Minutes

	EMIS NO.	PERSONAL NO.
Index No.		

Candidate's Name: ....

Candidate's Signature: ....

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".
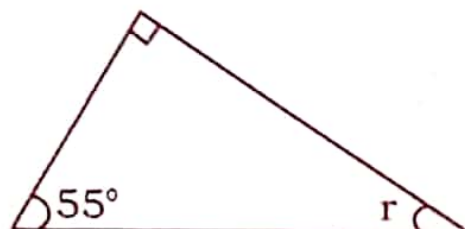
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1. Work out: 32 + 49

2. Find the next number in the sequence .

    5 , 7 , 11 , 13 , 17 , ...

3.   8m − 9x + m − 4x

4. Find the size of the missing angle marked r in the figure belo
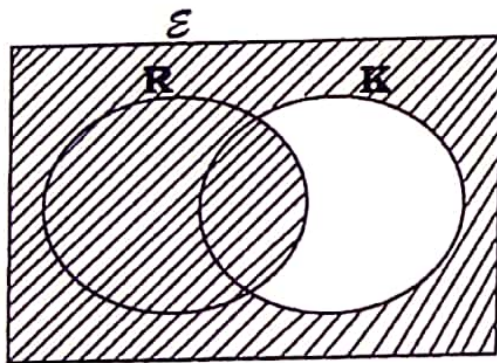

5. Find the multiplicative inverse of $\dfrac{3}{5}$.

6. Express 2·4 in standard form .

7. In the figure below, find the bearing of K from P .

N
P
N
$20°$
K
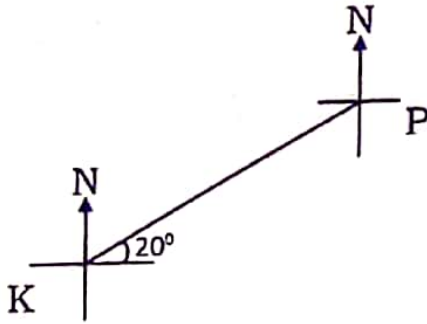
8. Describe the unshaded set region in the figure below .

ε
R   K

9. Simplify: $\dfrac{2 \cdot 5 \times 0 \cdot 8}{0 \cdot 05}$

10. Work out the mean of $x - 2$, $2x$ and $3x - 4$.

11. The perimeter of the figure below is 26 dm and its width is 4 dm. Find its length.

4 dm
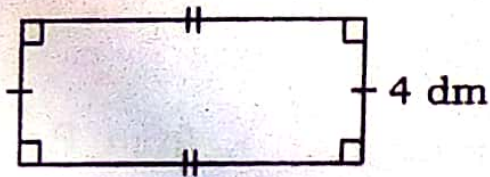
12. Calculate the range of the integers below.

    ⁻1 , 3 , 0 , ⁻8 , -2 , 7

.3. Solve for m : $\dfrac{m}{3} = 7$ (mod 8)

4. Round off 69·98 to the nearest tenths.

. Find the number whose Scientific notation is $5·38 \times 10^{-2}$

16. 6 boys can dig a garden in 15 days . How many more boys are needed in order for the garden to be dug in only 9 days ?

17. In the space below, construct an angle of 75° using a pair of compasses , a pencil and a ruler only .

18. The P.7 candidates will go for an excursion next week. What is the probability that they will go on a day that starts with letter 'T' ?

19. Work out :

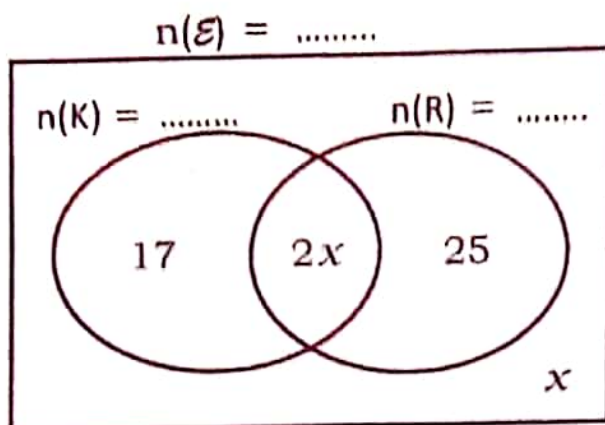|	litres	ml
	5	820
−	3	975

20. Solve : $\dfrac{3m}{7} - 1 = 5$

SECTION B   (60 MARKS)

21(a) Ketty covered $\dfrac{1}{3}$ of the journey and was left with 12 km . How long was the whole journey ?   (3 marks)

(b) Express 0·363636 .... as a common fraction in its lowest form .   (2 marks)

22. Use the Venn diagram below to answer the questions that follow .

$n(\mathcal{E})$ = ...

$n(K)$ = ... $n(R)$ = ...

17    $2x$ 25

x

(a) Find the value of x if the sum of $(K \cap R)$ and $(K \cup R)^c$ is 21 .
(2 marks)

(b) Work out $n(\mathcal{E})$ (2 marks)

23. The table below shows the marks obtained by the candidates of a certain school. Use it to answer the questions that follow.

Mark	80	44	98	75
No. of pupils	3	2	1	2

(a) How many candidates does the school have ?   (1 mark)

(b) Find the modal mark .   (1 mark)

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(c) Calculate the average mark .   (3 marks)
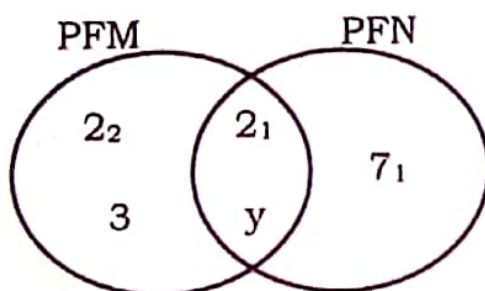
24. Given the digits 4 , 3 , 0 , and 7 .

   (a) Form the largest four-digit numeral using all the above
       digits   (1 mark)

   (b) Write the smallest four-digit number formed in words.
                                                    (2 marks)

   (c) Work out the product of the numbers in (a) and (b) above
       using lattice method .   (2 marks)

25. Use the Venn diagram below to answer the questions that follow .

PFM   PFN

2_2 2_1
              7_1
   3   y

(a) Find the value of y if the HCF of M and N is 6 . (2 marks)

(b) Find the value of ;
    (i) M   (ii) N   (2 marks @)

26(a) Solve and find the solution set for $2 - 3m \leq 17$ if m is a negative integer . (3 marks)

(b) Find the integer that is 7 steps to the left of $^{+}4$. (2 marks)

27(a) The interior angle sum of a regular polygon is 1800°. How many sides has the polygon ? (3 marks)

(b) Find out the number of right angles the above polygon has . (2 marks)

28. Mukasa , Masarak and Akoth shared some apples in the ratio of 5:1:4 respectively . If Mukasa and Masarak together got 16 apples more than Akoth ,

(a) How many apples did they share altogether ? (3 marks)

(b) How many apples did Akoth get ? (2 marks)

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29. The table below shows the items bought by Mr. Tiga .

Complete the table . (5 marks)

Item	Quantity	Unit cost	Amount
Sugar	$2\frac{1}{2}$ kg	sh. 3,400@kg	sh. _____
Wheat flour	_____	sh. 3,500@kg	sh. 14,000
Milk	3 litres	sh. _____ @ litre	sh. 5,400
Margarine	$\frac{1}{2}$	sh. _____ @ kg	sh. _____
Total expenditure			sh. 34,900

30. A trader bought a dress at sh. 30,000 and sold it to Tina at a profit of 20% . Tina also later sold it to Josephine at a loss of 10% . At what price did Josephine buy this dress ?
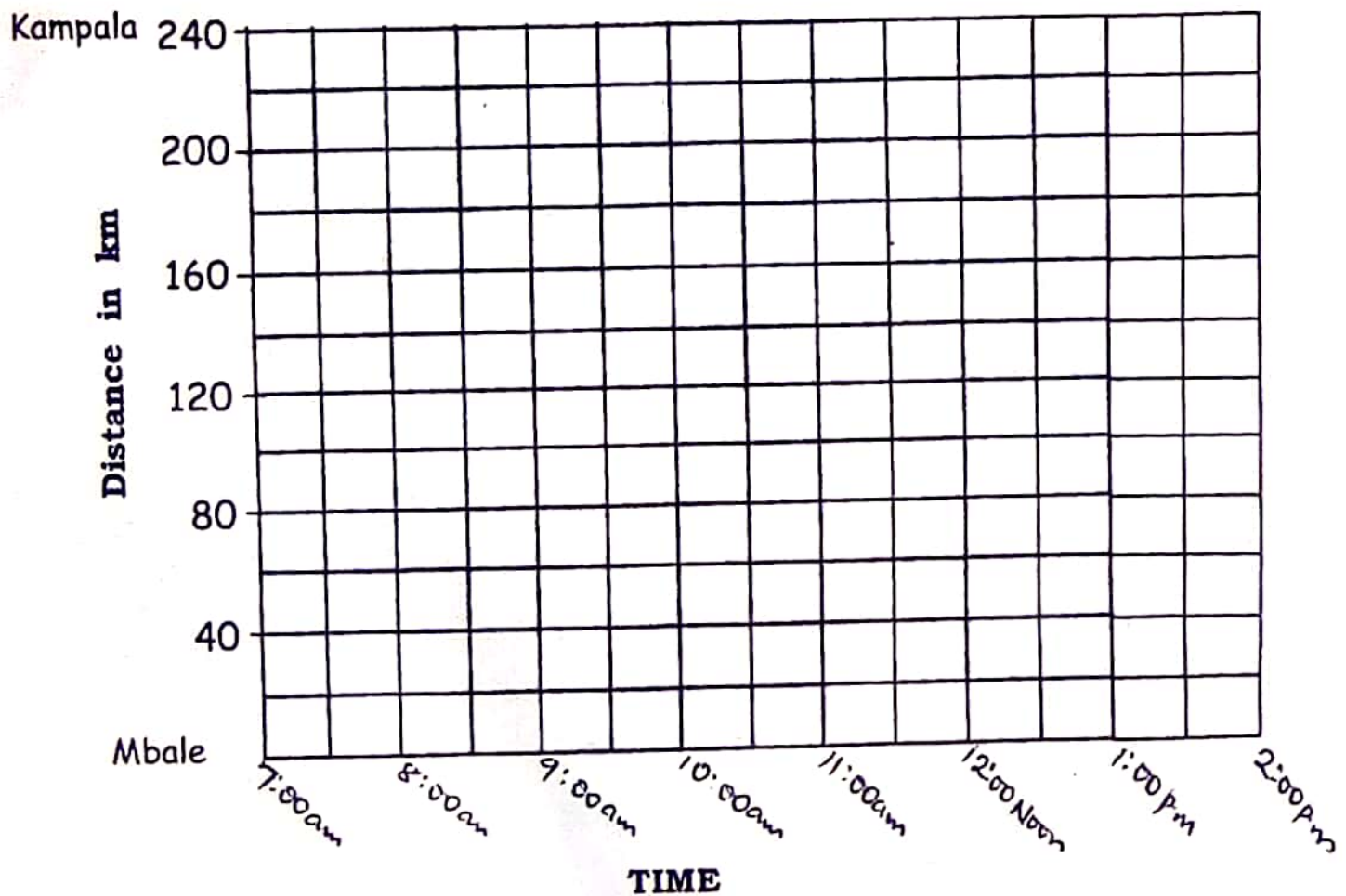(4 marks)

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31(a) Using a ruler , a pair of compasses and a sharp pencil only, construct triangle DEF where $\overline{DE}$ = 8cm , $\overline{EF}$ = 5cm and angle DEF = 120° .   (4 marks)

(b) Drop a perpendicular line from F on to the extension of DE at T.   (1 mark)

(c) Measure line FT in cm   ....   (1 mark)

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32. A driver left Mbale at 7:00a.m. driving at a speed of 60km/hr for 2 hours to Jinja. He rested at Jinja for 30 minutes and then continued to Kampala at a speed of 80km/hr. He rested at Kampala for 30 minutes and then drove back to Mbale at a steady speed of 120 km/hr.

(a) Show the above journey on the graph below. (3 marks)

(b) Calculate the driver's average speed for the whole journey. (2 marks)

END

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