NAMAGUNGA PRIMARY BOARDING SCHOOL
PRE – PRIMARY LEAVING EXAMINATION, 2024
MATHEMATICS – SET 9

Time allowed: 2 Hours 30 Minutes

Index No.	Random No.						Personal No.		

Candidate's Name: .....

Candidate's Signature: .....

DISTRICT NO:

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 handwriting 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"

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)

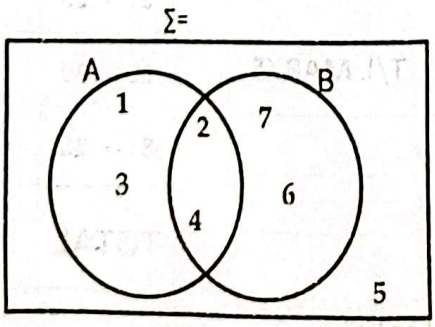
1. Work out: 97 + 52

2. Write **"Three hundred nine thousand, ninety-one"** in figures.

3. Subtract $^{-}20$ from $^{+}5$.

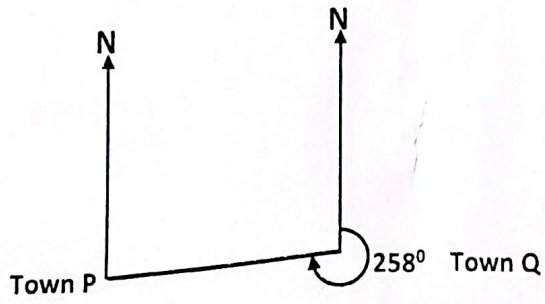
4. Solve: $16 - 4(p - 4) = 12$.

5. Use the Venn diagram below to find the number of subsets in $(A - B)^c$



6. By selling a dress for Sh. 24,000, a trader made a loss of 20%. How much did the trader buy it?

7. Find the direction of town **Q** from town **P** in the diagram below.



8. Find the number written in standard form to give 7.79×10^{-3}

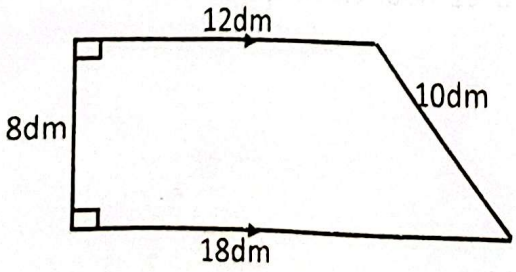
9. A mathematics workshop lasted for 2 hours 47 minutes. If it started at 13 10 hours, at what time did it end in a 12 hour clock system?

10. Work out the Highest Common Factor of 12, 18 and 24.

11. Using a protractor, draw an angle of 300^0 .

12. Work out: 3.26 – 3.48 + 4.9

13. A cockroach moved round the figure below twice. Find the distance it covered in cm.



14. Work out: $312_{five} - 44_{five}$

15. Simplify: $7y - 3k - 6y - 2k$.

16. Express 0.1666... as a vulgar fraction in its simplest form.

17. Given the integers: $^{-}8$, $^{-}9$, 3, 0, $^{-}7$ and $^{-}2$, find their range.

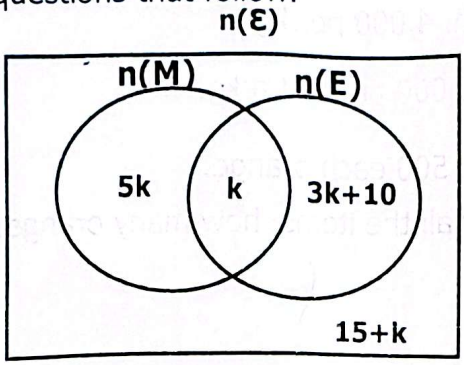
18. The area of a square garden is $5\frac{1}{16}$ m^2. Calculate the length of each side.

19. Express 493 in Roman numerals.

20. A bus took 2 hours 30 minutes to cover a distance of 240km. At what speed was it travelling?

SECTION B (60 MARKS)

21. The Venn diagram below shows how candidates of P.7 like different subjects, English (E), Mathematics (M) and others. Study it carefully and use it to answer the questions that follow.



(a) Given that $\frac{1}{2}$ of the number of pupils who like Mathematics only is equal to the number of pupils who like neither English nor Mathematics, find the value of **k**. (**3marks**)

(b) How many pupils like either English or Mathematics? (2marks)

22. Barigye went to the market and bought the following items.

2 bars of soap at sh. 14,000.

3 kg of beans at sh. 4,000 per kg.

$\frac{1}{4}$ kg of rice at sh.3,000 per half a kg.

A heap of oranges at sh. 500 each orange.

If he paid sh. 30,000 for all the items, how many oranges did he buy?

(5 marks)

23. The sum of 3 consecutive counting numbers is 30. If the first number is x^2, find the numbers. **(5marks)**

24. Town **K** is 80 km away from town **M** on a bearing of 135^0 and town **K** is 60 km from town **Z** on a bearing of 060^0.

a) Draw a sketch showing the three towns. (1 mark)

b) Using a scale of 1cm to represent 10km, draw an accurate diagram showing the location of the three towns. (3 marks)

c) Find the bearing of town M from town **Z**. (1mark)

25. A woman used two thirds of her salary to buy food, 25% of the remainder to pay bills and saved Sh.250,000. How much money does she earn monthly? (5 **marks**)

26. A factory produces 200 boxes of bars of soap every day. Each box contains 12 bars of soap.

(a) If each bar of soap is sold for sh. 6,000, how much money does the factory make in a day? (**3marks**)

(b) Irene bought some boxes of soap from the factory and sold all of them at sh. 300,000 making a total profit of sh. 30,000. How many boxes did she buy? (**2 marks**)

27.(a) Solve and find the solution set for: $3x + 5 > 20$ **(3 marks)**

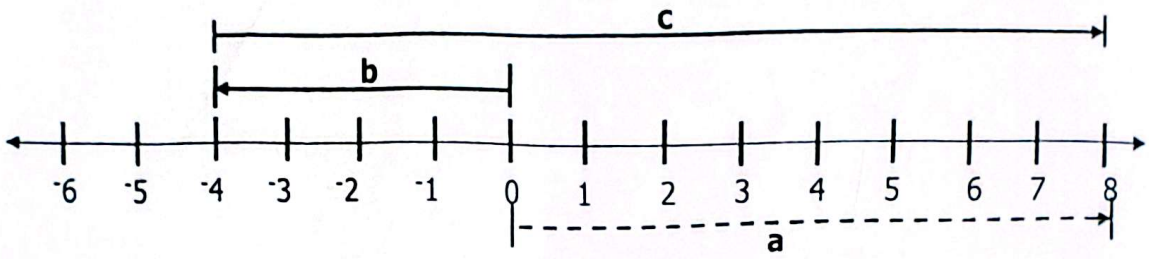
(b) Given that a = b and b = -5, find the value of 4a – b. **(2 marks)**

28. Town **A** is 40km away from town **C**. John left town **C** for town **A** via town **B** at 10:00a.m travelling at an average speed of 40km/h. At 10:15a.m, he got a puncture at town **B**.

(a) How far is town **B** from town **A**? **(2 marks)**

(b) If it took him 15 minutes to repair his motorcycle, at what time did he reach town **A** at a speed of 60km/h? **(3 marks)**

29. Study the number line below and use it to answer the questions that follow.



(a) Name the integer marked; **(1 mark each)**

(i) a = _____

(ii) b = _____

(iii) c = _____

(b) Write the mathematical sentence shown on the above number line.

(2 marks)

30. The table below shows marks scored by candidates of P.7 in a mathematics test.

Marks obtained	70	40	90	80	60
Number of pupils	m	2m	5	6	m+1

(a) If 16 pupils did the test, find the value of m. **(3marks)**

(b) Calculate the average mark of all pupils who scored below 70.

(3 marks)

31. The interior and the exterior angles of a regular polygon are in the ratio of 3:2 respectively.

a) Name the polygon. **(3 marks)**

b) Calculate its interior angle sum. **(2marks)**

32. A cylindrical container holds 6.16 litres of juice. If its height is 10cm;

(a) calculate its base area. **(3 marks)**

b) Work out its radius. **(2 marks)**

***** END ****