NAMAGUNGA PRIMARY BOARDING SCHOOL
PRE-REGISTRATION EXAMINATION SET 1, 2023
PRIMARY SEVEN - MATHEMATICS

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".

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SECTION A (40 marks)

1. Add   723 + 264

2. Write in figures;   Twenty seven thousand forty .

3. Study the Venn diagram below and find the value of n .

$n(\varepsilon) = 40$
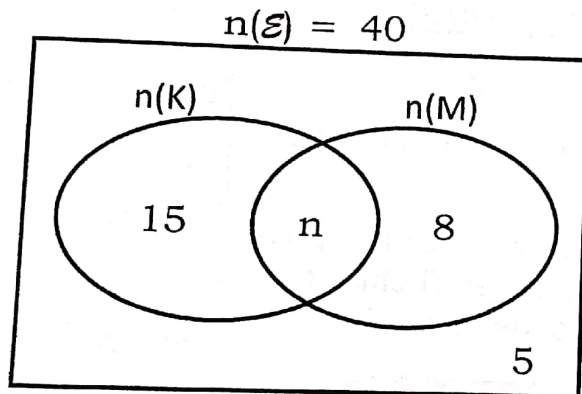
4. Express the next number in the sequence below as a Roman numeral .

    0 , 1 , 5 , 14 , 30 , ...

5. At what speed should Hannah run round the field if she is to cover a distance of 6km in 90 minutes ?

6. Using a ruler, a sharp pencil and a pair of compasses only, construct an angle of 75° in the space below.

7. Below is a quadrilateral. Find its area.
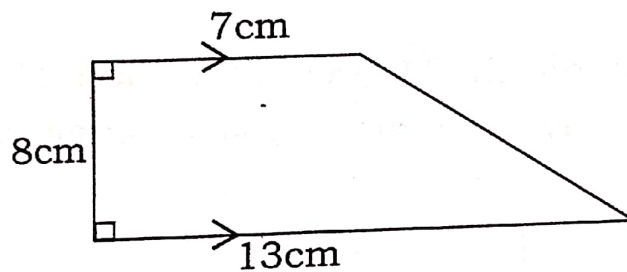
8. How many tins of 500 grams would one get from a 4 kilogram tin of Kimbo ?

9. Find the probability of Pearl going to the market if she usually goes there on a day beginning with letter T.

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10. Write 25·6 in standard form.

11. Find the least number of sweets which can be shared by 12 boys or 15 girls leaving a remainder of 4.

12. How much simple interest on sh. 240,000 at a rate of $4\frac{1}{2}\%$ per month would Samuel pay to a micro finance bank after 3 months?

13. Work out the sum of 7·5 and 5.

14. Mutunda was moving at a speed of 36km/h. Express her speed in m/sec.

15. Work out the difference between the 6th and 4th triangular numbers.

16. In a school of 540 pupils, 20% of them are boys and the rest are girls. Find the number of girls in the school.
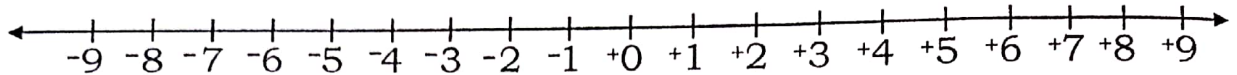
17. Show fifteen minutes before midnight on the clock face below.
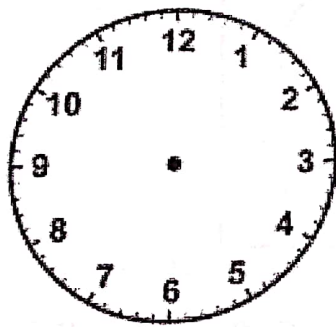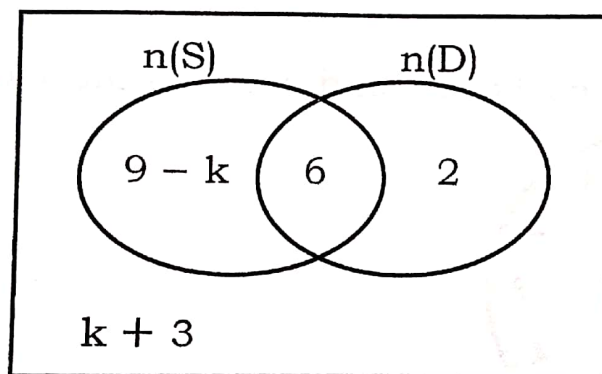

18. Solve ; $2x - 9 = 3 - x$

19. The average weight of four boys is 56 kg, when two teachers join them, their average weight becomes 60 kg. Find the weight of the two teachers.

20. Work out $+3 - {}^-6$ on a number line below.

SECTION B   (60 MARKS)

21. The Venn diagram below shows the number of pupils who like singing (s), some like dancing (D) and the rest like neither of the two.

(a) If 7 pupils like neither singing nor dancing, find the value of k. (2 marks)

(b) Find the probability of selecting a pupil at random who does not like dancing. (3 marks)

22(a) Simplify: 4 pens + 3 books − 2pens + 2 books . (2 marks)

(b) Kiryawire is 24 years old and his brother Kakande is 6 years old. After how many years will Kiryawire be three times as old as his brother Kakande ? (4 marks)

23. Racheal went to the supermarket and bought the items below .

$2\frac{1}{2}$ kg of sugar at sh. 4,000 each .

3 tins of powdered milk for sh. 60,000 .

4 water bottles at sh. 10,000 a bottle .

(a) Work out the amount of money she paid after getting a discount of 20% (4 marks)

(b) Calculate her change if she had three notes of sh. 50,000 and she used sh. 8000 as transport fare . (2 marks)

24(a) Work out $133_{\text{five}} - 42_{\text{five}}$ (2 marks)

(b) Solve for the unknown base in $44_n = 30_{\text{eight}}$ (2 marks)

25. On a day when $\frac{1}{6}$ of the pupils in the class were absent, 35 pupils were present. How many pupils were present when $\frac{1}{7}$ of the pupils in the class were absent ? (5 marks)

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26(a) Using a ruler, a pencil and a pair of compasses only, construct a triangle MAP where $\angle M = 60°$, Length $\overline{MA} = 7.5$cm and $\angle A = 45°$.

(4 marks)

(b) Measure the length $\overline{AP}$ in cm. (1 mark)

....
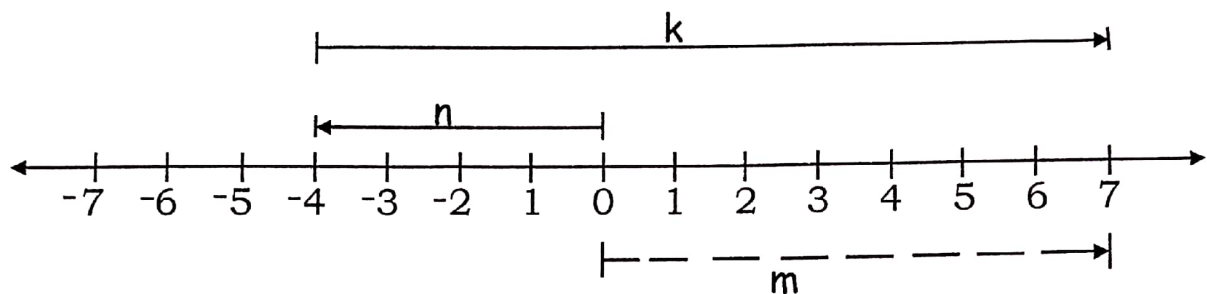
27. Study the rectangular prism below carefully and answer the questions that follow.

5mm

4mm

7mm
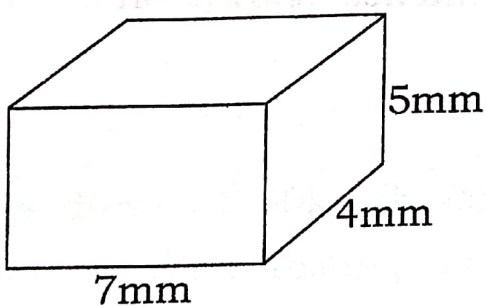
(a) Calculate the volume of the above figure. (2 marks)

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(b) Find the total surface area of the above prism. (3 mark

28. Use the number line below to answer the questions that follow.

(a) Name the integers represented by; (1 mark @)

   k = ...   m = ...   n = ...

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

29(a) Find the highest common factor (HCF) of 8 and 12. (2 marks)

(b) The sum of 4 consecutive cardinal numbers is 102 .
Find the largest number . (4 marks)

30(a) Simplify; $\frac{2}{3}$ of $78 + 42 \div 7$ (2 marks)

(b) Divide 2121 by 3 . (2 marks)

31. Mutaka drove at 80km/h for $2\frac{1}{4}$ hours . He then rested for 45 minutes. After resting, he covered 240km at the same speed.

(a) What distance did he cover before resting ? (2 marks)

(b) Calculate his average speed for the entire journey . (3 marks)

32. The pie-chart below shows how Mr. Mukiibi spends his monthly salary. Use it to answer the questions that follow .
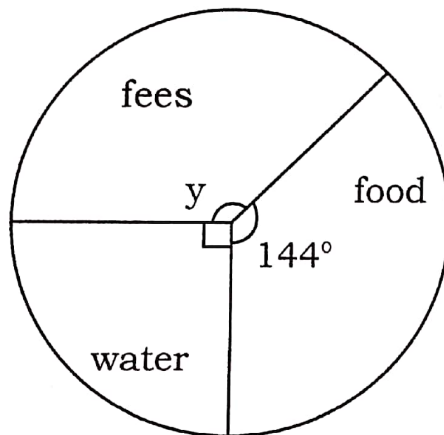
(a) Find the value of y . (2 marks)

(b) If he spends sh. 54,000 on food than on fees, how much is his monthly earning ? (2 marks)

END