

**NAMUTUMBA TOWN COUNCIL ACADEMIC BOARD  
(NATCAB)  
PRIMARY SEVEN MOCK EXAMINATIONS 2023  
MATHEMATICS**

*Time allowed: 2 Hours 30 Minutes*

EMIS NO.						PERSONAL NO.		
Index No.								

**Candidate's Name:** .....

**Candidate's Signature:** .....

**School Random No:** .....

**District ID:** .....

**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 Examiners' Use Only".

FOR EXAMINERS' 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		

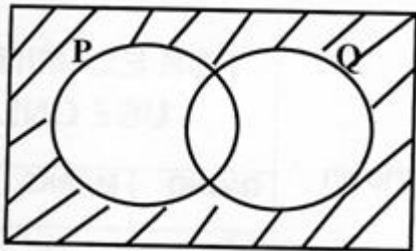
## SECTION A

1. Divide  $8 \div 2 =$

2. Write in Roman numerals: 49

3. Simplify  $^{-}7 - ^{-}4 =$

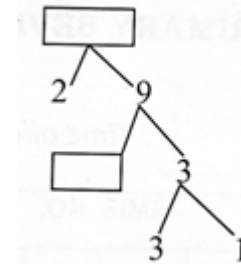
4. In the diagram below, describe the shaded part.



5. Subtract:  $4 - y$  from  $2 + y$ .

6. Multiply:  $\frac{3}{5} \times 2$

7. Complete the factor tree.

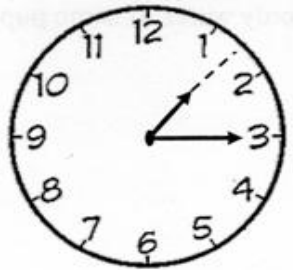


8. Using a pair of compasses, a ruler and a pencil, construct an angle of  $45^{\circ}$  in the space provided.

9. Convert 72 Km/hr to M/sec.

10. The mean age of 6 boys is 6 years. The mean age of 4 girls is 11 years. Find the average age of all the 10 children.

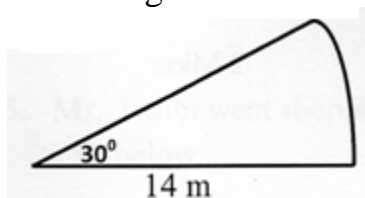
11. Tell the morning time shown on the clock face below.



12. Given that Ksh 1 = 40 Uganda shillings. If Kagoya had Kshs. 250. How much money did she have in Uganda shillings?

13. If set  $P = \{2, 3, 5, 7, 11\}$  and set  $Q = \{1, 2, 3, 4, 5, 6, 7, 8\}$  Find  $P \cap Q$

14. In the diagram below, find the area of the figure.



15. Workout:
- $$\begin{array}{r} 1001_{\text{two}} \\ + 111_{\text{two}} \\ \hline \end{array}$$

16. Kirunda had  $\frac{2}{3}$  of the bread, he ate a third of it in the evening. What fraction did he eat?

17. The interior angle of a regular polygon is  $120^\circ$ . Find the number of sides of the polygon.

18. Workout  $3 \div 2$  (finite 3)

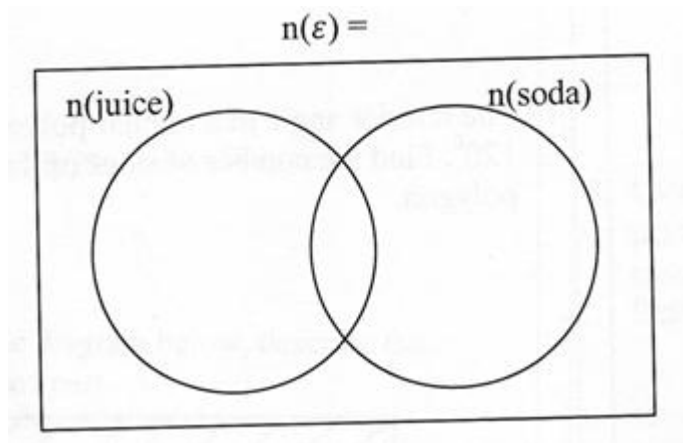
19. Find the value: 2 of  $4 \div 2$

20. Solve the inequality  
 $2y \leq 4 + 4y$

## SECTION B

21. In a class of 100 pupils, all of them drink water, 60 of them drink both water and juice, 50 of them drink both water and soda and that 10 pupils drink only water. If some pupils drink water, soda and juice.

(a) Show the above information in the Venn diagram below.



3 Mks

(b) How many pupils drink water, juice and soda?

2Mks

(c) Find the probability that a pupil picked at random from the class drinks only two of the three drinks?

1Mk

22. (a) Round off 3743 to the nearest tens

2 Mks.

(b) Solve for base W''  $202_w = 74_{ten}$

3 Mks

23. (a) Using a pair of compasses, a ruler and a sharp pencil only, construct a parallelogram PQRS, where line  $\overline{PQ} = 7$  cm, angle  $PQR = 120^\circ$  and  $\overline{PS} = \overline{QR} = 5$  cm

4Mks

- (b) Measure diagonal PR in cm.

1Mk

24. A motorist travelling from Namutumba to Kampala took 4 hours at a speed of 60 km/hr, when he reached Kampala, he rested for  $\frac{1}{2}$  hours. He then returned to Namutumba at a speed of 80 km/hr.

- (a) Find the distance between Namutumba and Kampala?

2 Mks

- (b) Calculate the average speed for the whole journey.

3 Mks.

25. Mr. Ivaibi went shopping with fifty thousand shillings and bought items as shown in the table below.

ITEM	QUANTITY	UNIT COST	AMOUNT
Meat	3 Kgs	Sh. 6,000	Sh. _____
Rice	4 Kgs	Sh. _____	Sh. 16,000
Soap	_____ bars	Sh. 5,500	Sh. 11,000

(a) (i) Complete the table above.

(b)(ii) Find the total expenditure

1Mk

(c) If Mr. Ivaibi was given a discount of 10%, how much was his change? 2Mks

26. Peter is 40 years old, Annet is 10 years old. In how many years will Peter be twice as old as Annet?

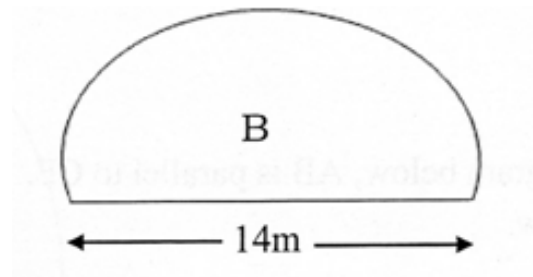
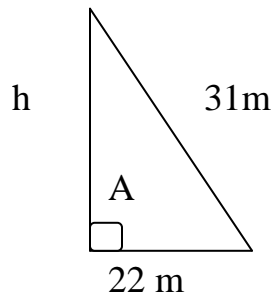
4 Mks

27. (a) Given the following digits; 2, 3 and 4 form all the two digit numerals that can be formed. 3 Mks

(b) Identify all the numerals formed above that are divisible by three 2 Mks

28. Study the figures below carefully and then answer the questions that follow

The area of shape A is equal to that of shape B



(a) Find the value of h. 2Mks

(b) Work out the perimeter of shape A. 2Mks

29. Two bells ring at different intervals of 30 minutes for lower primary and 40 minutes for upper primary respectively.

(a) After how many hours will these bells ring together? 3 Mks

(b) If they rung together at 10:30 a.m. At what time will they ring together the second time? 2Mks

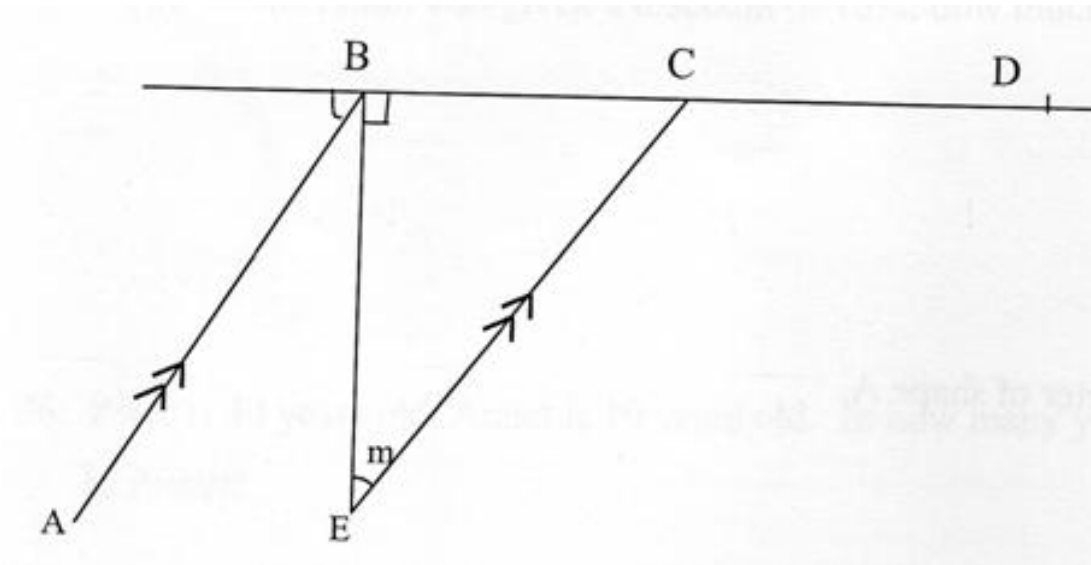
30. Mulondo a member in livestock production association borrowed shs. 1,200,000/= from Parish Development Modal (PDM) at an interest rate of 2% per year.

(a) If he paid an interest of shs. 48,000/=: for how long did he use the money? 3Mks

(b) Calculate the total amount of money he paid. 2 Mks



31. In the diagram below, AB is parallel to CE. Study it carefully and answer the questions that follow.



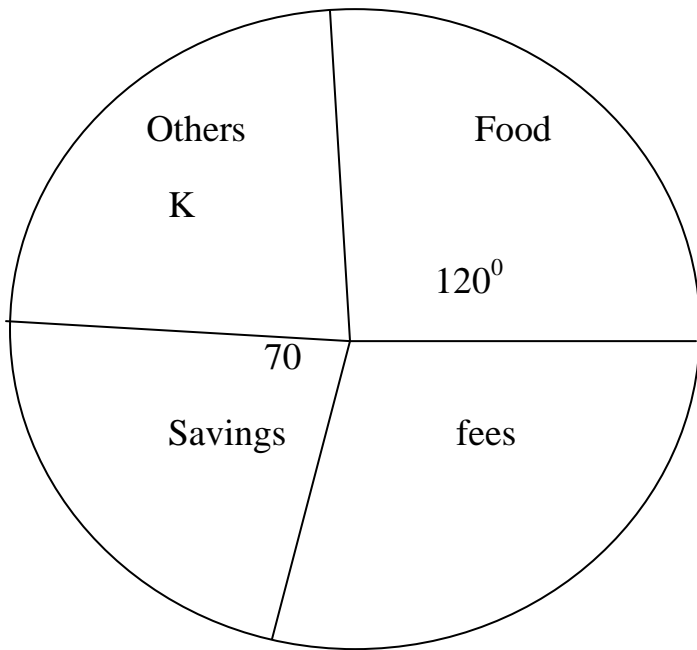
(a) Find the value M

2 Mks

(b) Calculate the size of the angle ECD

2Mks

32. Ngobi spent his monthly salary as shown in the pie-chart below. Use it to answer the questions that follow.



(a) Find the value of k in degrees.

2 Mks

(b) If Ngobi spent sh. 60,000 more on food than fees, find Ngobi's monthly salary. 3 Mks

(c) Express the sector for others as a fraction.

1 Mk.

**GOOD LUCK**