



KAMPALA CAPITAL CITY AUTHORITY

DIRECTORATE OF EDUCATION AND SOCIAL SERVICES

PRIMARY SEVEN MOCK EXAMINATIONS 2023

MATHEMATICS

TIME ALLOWED: 2 HOURS 30 MINUTES

INDEX NO:

EMIS No.						Personal No.		

MUZEYI KIZITO

CANDIDATE'S NAME:

CANDIDATE'S SIGNATURE:

EMIS No:

DIVISION NAME:

Read the following instructions carefully.

1. This paper is made up of two sections:
A and B
2. Section **A** has **20** questions (**40** marks)
3. Section **B** has **12** questions (**60** marks)
4. Answer ALL questions in both sections **A** and **B**
5. ALL answers **MUST** be written in Blue or Black
Ball - point pen or ink
6. Un-necessary changes in your work may lead
to loss of marks.
7. All diagrams **MUST** be drawn in pencils.
8. Any handwriting that cannot be easily read may
lead to loss of marks.
9. Do **not** fill any thing in the boxes shown
"**For Examiner's use only**".

FOR EXAMINERS' USE ONLY

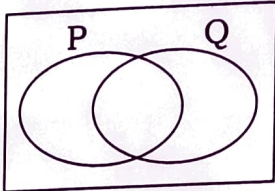
QN. NO.	MARKS	SIGN
1 - 10		
11 - 20		
21 - 25		
26 - 30		
31 - 32		
TOTAL		

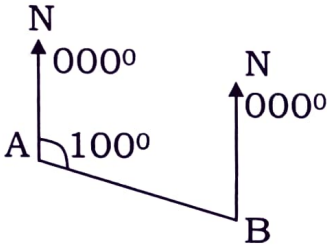
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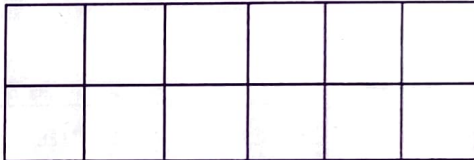
TURN OVER

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SECTION A

1. Workout: $6 \div 3$	2. Shade the region representing $(P \cap Q)^c$, in the Venn diagram below. 
3. Using distributive property to workout: $(81 \div 7) - (11 \div 7)$	4. Write the number 2023 in words.
5. Find the next number in the sequence given below. 2, 4, 7, 12, 19, ____	6. Solve the inequality: $3 - 2m < 7$
7. Express 13 as a decimal fraction. 20	8. The temperature on the top of the mountain was 5° celcius, at 11:00am. By 2:00pm, the temperature rose to 8° celcius. Find the new temperature on the top of the mountain.

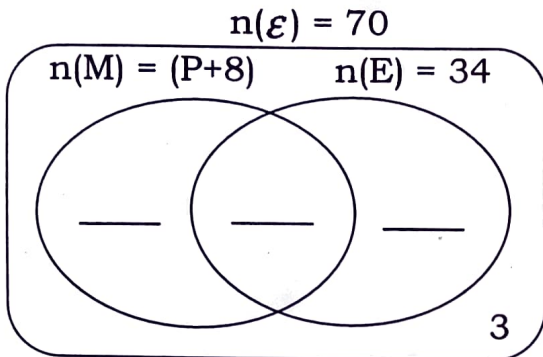
<p>9. Mariam scored the following marks her daily mental work exercise for for a week 7, 6, 6, 7, 2, 6, 8. What was her modal score?</p>	<p>10. A cyclist rode at a steady speed of 54 kilometer per hour. What was his speed in metres per second?</p>
<p>11. In the diagram below, find the bearing of A from B.</p> 	
<p>12. The cost of sending official announcement on a community radio is as follow.</p> <p style="text-align: center;"><i>Ug. Sh. 20,000 for the first 30 words</i> <i>Ug. Sh 1,000 for each extra word</i></p> <p>Find the cost of sending an announcement of 45 words through the the community radio.</p>	

13. Convert 0.04m² to cm ²	14. Simplify: K² - 3K + 2K² + 3K
15. If Set A = {c, o, w} , find the number of subsets in set A .	16. Write CIV in Hindu Arabic numerals.
17. Given that prime factors of Y = 2² x 3 and prime factors of X = 2¹ x 3² x 5¹ . Use the given prime factors above to find the LCM of X and Y .	18. In the diagram below shade 25% of the total number of squares. 
19. Using a ruler, a pencil and a pair of compasses only, construct an angle of 105° in the space provided below.	20. A pen costs sh. (2,000 + k) if it costs twice as much as a book write an expression for the cost of a book.

SECTION B

21. In a class of **70** pupils, **34** like English (E), **(P+8)** like Mathematics (M), **8** like both subjects and **3** like neither of the two subjects.

a. Using the information above complete the Venn diagram below.



(3marks)

- b. How many pupils like Mathematics?

(2marks)

22. Express **24.009** in standard form.

(2marks)

- b. **Workout:** $11_{\text{two}} \times 11_{\text{two}}$

(2marks)

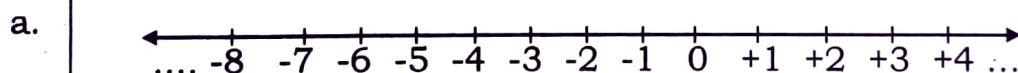
- c. Find the value of **2** in the number **1201_{nve.}**

(1mark)

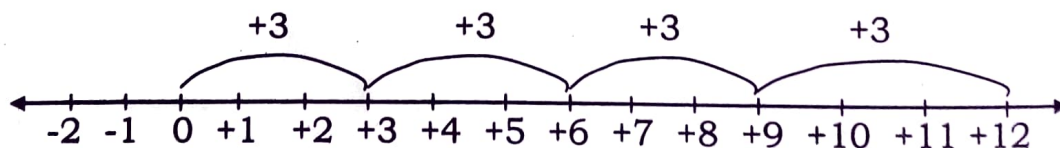
23. In a market of **800** people $\frac{1}{4}$ are children and the rest are adults. $\frac{2}{3}$ of the adults are women and the rest are men. If $\frac{3}{5}$ of the children are boys, how many boys are in the market? (2marks)

- b. Express the number of girls in the market as a percentage of women in the market. (3marks)

24. Workout: $-4 - -7$ using the number line below. (3marks)



- b. Write a mathematical statement from the number line below. (2marks)



25.	<p>A boy spent sh. 4,500 of his pocket money on breakfast, sh. 7,500 on lunch and sh. 6,000 on super. Using a radius of 3.5cm, construct an accurate pie-chart to show the above information.</p> <p style="text-align: right;">(5marks)</p>
26. a.	<p>Two trains, arrive at the station at an interval of 1½ hours one after the other. A man arrived at the station, 55 minutes after the first train had arrived. For how long will the man wait for the second train to arrive?</p> <p style="text-align: right;">(2marks)</p>
b.	<p>A motorist travelled 80km in 40minutes. Calculate the speed of the motorist in kilometers per hour.</p> <p style="text-align: right;">(3marks)</p>

27. Given that the present exchange rate is US \$ 1 to Ug. **Sh. 3,600**. If a watch costs Ug. **Sh. 72,000**, how much does one pay in US. dollars for a watch?

(2marks)

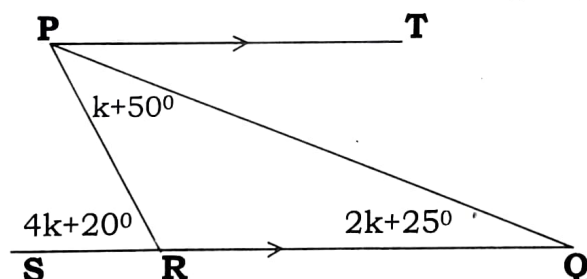
- b. The cost of **0.25kg** of sugar is **sh. 1,250**. A teacher bought **2½kg** of sugar, how much money did the teacher pay for the sugar?

(3marks)

28. In the figure below line **PT** is parallel to line **SQ**. Study the diagram below and use it to answer the questions that follow.

a. Find the value of **K**.

(3marks)

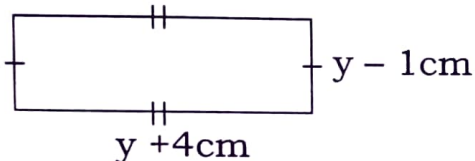


- b. Find the size of angle **RPT**.

(2marks)

29. Find the number of revolutions a wheel of diameter **70cm** can make to cover a distance of **4.4km**? (3marks)

- b. The perimeter of the rectangular floor of a room shown below is **34cm**. Find the value of **y** given that the length is **y + 4cm** and width **y - 1cm** respectively.



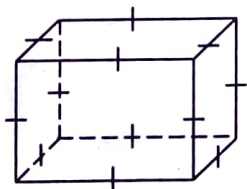
30. a. **Simplify:** $\frac{1}{2} \div \frac{2}{3} - \frac{3}{8}$

b. **Workout:** $\frac{0.45 + 0.55}{0.8 - 0.3}$

(2marks)

(3marks)

31. The figure below shows a cubical box of volume **1 litre**.
a. Find the length of its side in centimeters.
(1litre = 1000cm³)



(3marks)

b.	Workout its total surface area. (2marks)
32.	<p>A head teacher's office is 24metres East of the main hall and a P.7 block is 32metres North of the head teacher's office.</p> <p>a. Draw a sketch diagram to show the position of the 3 places (indicate the northern direction) (1mark)</p>
b.	<p>Using a scale of 1cm to represent 4metres, draw an accurate diagram and measure the shortest distance between the P.7 block and the main hall.</p>

(4marks)

END