KYOTERA DISTRICT EXAMINATIONS BOARD

PRIMARY LEAVING MOCK EXAMINATIONS 2023

MATHEMATICS

Time allowed: 2 hours 30 minutes

Candidate's Name: _____

School Name: _____

District Name: _____

Candidate's signature: _____

Index No. | | | | | | | | | |

Read the instructions carefully.

1. This paper comprises two sections **A** and **B**.
2. Section A has 20 short questions (40 marks)
3. Section B has 12 questions (60 marks)
4. Attempt all questions. All answers to both Sections A and B must be written in the space provided.
5. All answers must be written using blue or blackball point pen or ink. Only diagrams should be drawn using pencils in the space provided.
6. Unnecessary alteration of work may lead to loss of marks.
7. Any handwriting that cannot be easily read will lead to loss of marks

FOR EXAMINERS USE ONLY	
QN. NO	MARKS
1-5	
6-10	
11-15	
16-20	
21-22	
23-24	
25-26	
27-28	
29-30	
31-32	
TOTAL	

Do not fill any thing in the boxes indicated for examiners' use only.

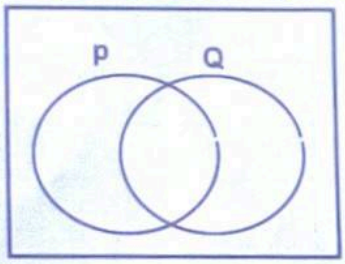
SECTION A: 40 MARKS

Attempt **all** *questions in this section*
Questions **1** *to* **20** *carry* **two** *marks each*

1. Divide **26** by **2**.

2. Write **6049** in words.

3. Shade $(P \cup Q)^1$ in the figure below.



4. Increase **600kg** in the ratio of **3:2**

5. If 📖 represents **5** books, how many books are represented by; 📖📖📖📖?

6. Find the next number in the sequence below:
   $^{-}1$, $^{-}3$, $^{-}5$, $^{-}7$, _____

7. Given that **P** = 3, **Q** = $^{-}2$, and **R** = 5. Find the value of **PQ + R.**

8. Alice exchanged a **ten thousand shilling** note for five hundred shilling coins. How many coins did Alice get?

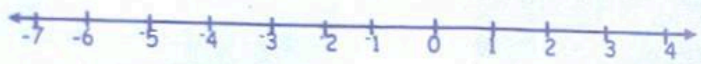
9. What is the **complement** of $(X-20)^0$?

10. A short play on BBS-TV started at **9:15p.m** and ended at **10:00p.m**, for how long did it last?

11. Express **20m** as a ratio of **60cm**.

12. Musisi travelled a distance at a speed of **72km/h**. Convert his speed to metres per minute.

13. Work out 2×-3 using the number line below.



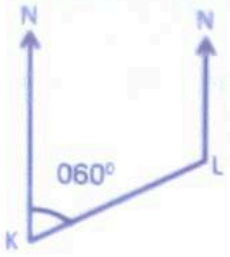
14. Find the solution set for the inequality:
$8 < 2p \geq 14$

15. What number has been expanded to give
$(5 \times 10 \times 10 \times 10) + (3 \times 10) + (2 \times {}^{1}/_{10})$?

16. After covering $\frac{2}{7}$ of the journey, Anita had **30km** to go.

How long was the journey?

17. Use the diagram below to find the bearing of town **K** from **L**.



18. The mean of **6**, **x + 2** and **8** is **7**. Find the value of **X**.

19. Write **0.00104** in standard form.

20. A man had **35kg** of meat and shared it among a certain number of people. If each person got **200g** of meat, how many people shared it?

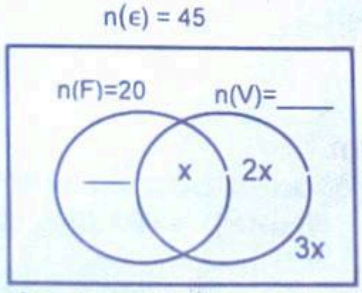
SECTION B : 60 MARKS

Attempt **all** *questions in this section.*
Marks for **each part** *of the question are* **indicated** *in the brackets.*

21. A school has a population of **1072** pupils.
(a) What is the sum of the place value of 0 and the value of 7? *(03marks)*

b) Round off the above number to the nearest **hundreds**. *(02marks)*

22. In a class of 45 pupils,20 like football (F), some like both games and 2x like only volleyball (V) as shown below.



a) Complete the venn diagram above. *(02marks)*

b) Find the value of **X**. *(03marks)*

23. Joel bought the following items.
3kg of sugar at **sh.** 5,000 per kg.
$1^1/_2$kg of meat at sh. 15,000 per kg.
500g of rice at **sh.** 6,000 per kg.
3 heaps of onions at sh. **1,500**.
If he was given a discount of 10%, how much did he pay? *(06marks)*

24. The sum of 4 consecutive even numbers is 76. If the second number is W, Find the largest number. *(04marks)*

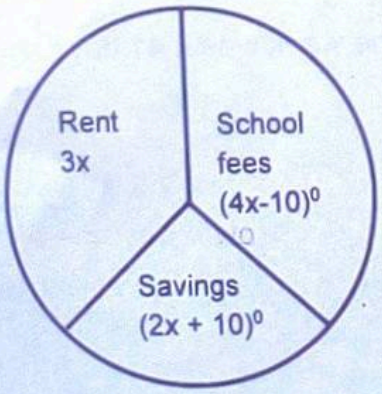
25. a) If today is Tuesday, what day of the week was it **41** days ago? *(03marks)*

b) Use a dial to work out: **2 - 4 =** _____ **(finite 6)** *(02marks)*

26. a) **Solve:** $\frac{p+2}{4} = \frac{4p-4}{22}$ *(02marks)*

b) The perimeter of a triangle is **34**cm. Find the value of r if its sides are **(2r + 5)cm, (3r-10)cm** and **(r+3)cm.** *(03marks)*

27. The pie chart below shows how Musa spent his monthly Salary. *Use it to answer the questions that follow.*



a) Find the value of **X** in degrees. *(02marks)*

b) If Musa spent **sh.540,000** on rent, what was his monthly salary? *(03marks)*

28. In a class, **20%** of pupils like mathematics, **30%** of the remainder like science and the rest like English.
    a) What fraction of the pupils like English? *(03marks)*

b) If **12** pupils like science, how many pupils are in the class? *(02marks)*

[ ]

29. a) With the help of a pencil, ruler and a pair of compasses only, construct a **square** with diagonals 9cm each. *(03marks)*

b) Find its **perimeter**. *(02marks)*

30. A taxi left Mutukula town for Kampala. *Study the* **timetable** *below and answer the questions that follow.*

Town	Arrival time	Departure time
Mutukula		6:00a.m
Kyotera	7:05a.m	7:20a.m
Masaka	8:10a.m	8:30a.m
Kampala	11:50a.m	

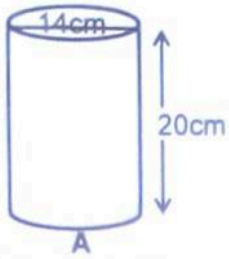
a) When did the taxi arrive at Kyotera in a **24 hour** clock system? *(01mark)*

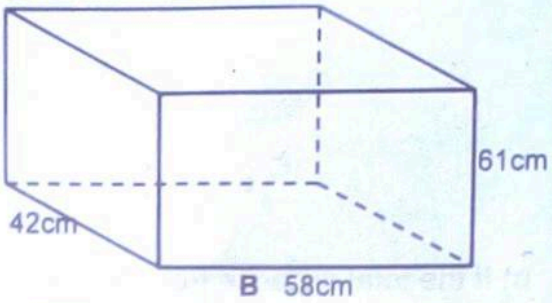
b) For how long did the **taxi stay** at Masaka? *(02marks)*

c) If the total distance from Mutukula to Masaka is **78km**, calculate the average speed for the taxi from Mutukula to Masaka.*(02marks)*

31. Convert **234_{five}** to base **three**. *(04marks)*

32. In a factory, juice is packed in cylindrical tins (A) which are later packed in boxes. **(B).** If the diameter of each cylindrical tin is 14cm, study the figure below and answer the questions that follow.





a) How many tins **(A)** can fit in box **(B)**? *(02marks)*

b) Find the space left after **packing** tins in the box. *(04marks)*