



# BULIISA DISTRICT ACADEMIC BOARD

## PRIMARY LEAVING MOCK EXAMINATION, 2024

### MATHEMATICS

*Time Allowed: 2 hours 30 minutes*

Random Number	Personal Number

Candidate's Name:.....

Candidate's Signature:.....

School Name:.....

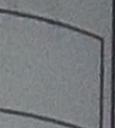
District ID:.....

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.**

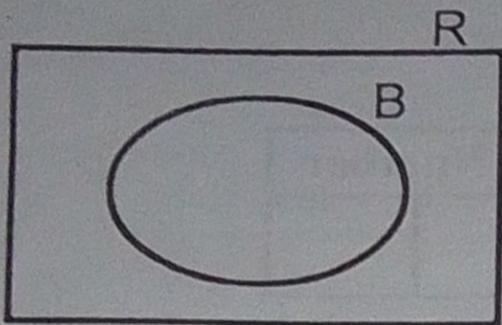
Read the following instructions carefully:

1. This paper is made up of two Sections: A and B.
2. Section A has 20 short-answer questions (40 marks) and Section B has 12 questions (60 marks)
3. All the working for both sections A and B must be shown in the spaces provided.
4. All working must be done using a blue or black ball-point pen or fountain pen. Only diagrams should be done in pencil.
5. No calculators are allowed in the examination room.
6. Unnecessary alteration of work may lead to loss of marks.
7. Any handwriting that cannot easily be read may lead to loss of marks.
8. Do not fill anything in the boxes indicated 'For examiners' use only'

FOR EXAMINER'S USE ONLY		
Qn. No.	Marks	Exrs' No.
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
<b>TOTAL</b>		



2. In the venn diagram below. Shade  $(R \cap B)'$ .



3. Find the range of: -2, 0, -5 and 3.

6. Kedron was facing in the North East direction. If she turned  $135^\circ$  anticlock wise, find her new direction.

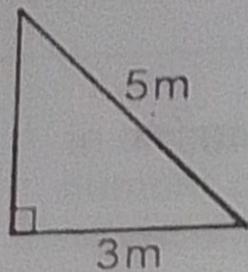
4. Solve for k:  $3 - k = 13$ .

8. If  $m = \frac{1}{3}$  and  $t = \frac{1}{27}$ , find the value of  $\frac{t}{m}$ .

9. Work out the square of 9.

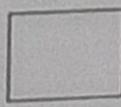
13. Using a ruler, a pencil and a pair of compasses only, construct an angle of  $150^\circ$ .

10. Work out the area of the figure below.

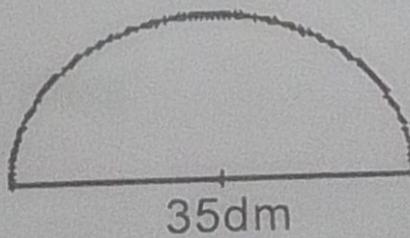


14. The cost of 3 books is Sh.4200.  
How many books can one buy with  
Sh. 9800?

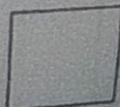
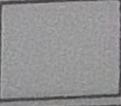
11. Convert  $69_{\text{ten}}$  to Quinary base.



15. Work out the perimeter of the figure  
below. ( $\pi = \frac{22}{7}$ ).



12. Round off 48.67 to the nearest  
whole number.



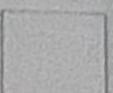
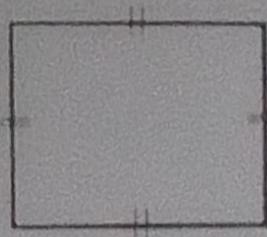
16. Express 0.2 litres as millilitres.

17. What number has been written in standard form as  $2.3 \times 10^2$ ?

18. It is fourteen minutes to 1 O'clock in the afternoon. Express the time in 24 hour clock system.

19. Write 20,024 in words.

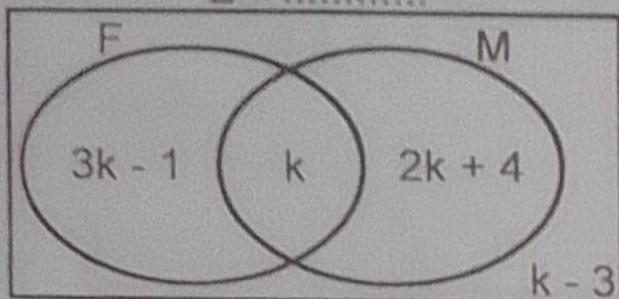
- 20 A string of length 24 metres was carefully folded to form a shape shown below. Find the area.



**SECTION B: (60 Marks)**

21. In a class, the number of pupils who eat matooke (M) only, is equal to the number of pupils who eat fish (F) only. Study the venn diagram representing this information below.

$$\Sigma = \dots$$



- (a) Find the value of  $k$ .

(2marks)

- (b) Calculate the total number of pupils in the class.

(3marks)

23. Peter is three times as old as Morgan. In 10 yrs time, their total age will be 48 yrs.  
 (a) How old is Morgan now? (3marks)

A tank holds  $\frac{1}{2}$  full of diesel. When 140 litres were removed, it became  $\frac{1}{2}$  full again. What is the capacity of the tank?

(3marks)

(b) How old was Peter 15 years ago?

(3marks)

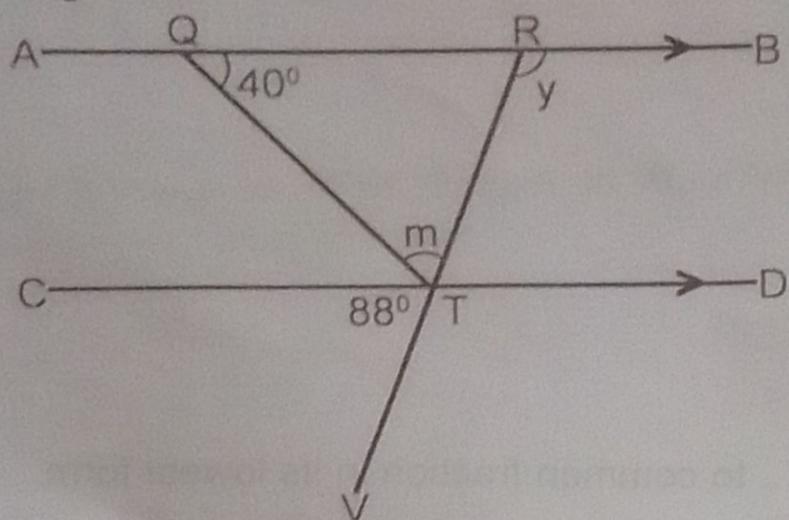
$$\frac{0.36 + 0.12}{0.4 \times 0.2}$$

24 (a) Work out:

(b) Convert 0.833..... to common fraction in its lowest form. (3marks)

25. At a party, there were 10% more men than women and 6% less children than women. If 52 children were among the guests. Find the total number of people who attended the party. (5marks)

26. In the figure below, line AB is parallel to CD. Angle CTV =  $88^\circ$  and angle TQR =  $40^\circ$ .



- (a) Find the size of angle  $m$ . (2marks) (b) Find the size of angle  $y$ . (2marks)

27

A taxi left Wanseko at 8.00 am for Kagadi at a speed of 60km/hr. The taxi got a mechanical problem after  $1\frac{1}{2}$  hours. The repair took 30 minutes, if the distance from Wanseko to Kagadi is 240km. At what speed should the taxi travel so as to reach Kagadi at exactly 12.00 noon? (5marks)

28. (a) Solve;  $3^{2a} \times 3 = 27.$  (2marks)

(b) Solve;  $\frac{1}{3} + m = 3.$  (2marks)

Adilah went to the supermarket and bought the following items  
from the supermarket. Calculate the shopping bill below.

ITEM	QUANTITY	UNIT COST	AMOUNT
Oranges	5 kg	RM 2.0000 per kg	RM 10.00
Bread	1 loaf	RM 4.5000 @ loaf	RM 4.5000
Chicken	1.5 kg	RM 10.00 per kg	RM 15.00
Cooking oil	500ml	RM 8.00	RM 4.00
<b>TOTAL EXPENDITURE</b>			RM 33.00

30. (a) Subtract  $213_{\text{base}} - 24_{\text{base}}$  (2marks)

$$\begin{array}{r} 213_{\text{base}} \\ - 24_{\text{base}} \\ \hline \end{array}$$

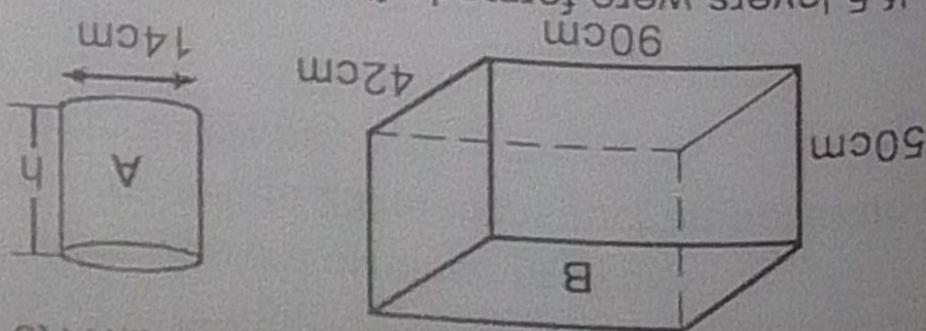
(b) Find the value of the unknown base given that  $32_n = 10001_{\text{base}}^2$ . (3marks)

(4marks)

- (b) Calculate the volume of the space left empty after packing tins (A) in the big box (B).

(2marks)

- (a) If 5 layers were formed after tin (A) had been packed in a big box (B). Find the value of  $h$ .



The figure below shows a cylindrical tin A to be packed in a big box B

32. Mbale is on a bearing of  $100^{\circ}$  from Tororo a distance of 125km. Jinja is on a bearing of  $240^{\circ}$  from Mbale a distance of 175km.
- (a) Using a scale of 1cm to represent 25km, construct an accurate diagram to show the position of three towns. *(4marks)*
- (b) Find the shortest distance between Jinja and Tororo. *(2marks)*

\*\*\*END\*\*\*