

# SHEEMA DISTRICT EXMINATIONS BOARD

## PRIMARY LEAVING MOCK EXAMINATION 2024

### MATHEMATICS

Time Allowed 2hours 30 minutes

RANDOM NUMBER						PERSONAL NUMBER		
0	0	1	2	7	2	1	1	3

Candidate's Name: T. V. RAS. INGURA. . . . . PRAMISE

Candidate's Signature: T. V. Rasingura. . . . . Pramise

School Name .....

**DO NOT OPE NTHIS BOOKLET UNTIL YOU ARE TOLD TO DO SO**

**Read the following instructions carefully**

1. This paper is made up of two sections Aand B
2. Section A has 20 questions (40mks)
3. Section B has 12 questions (60 marks)
4. Attempt all questions, all working and answers for both sections A and B must be written in the spaces provided. No piece of paper must be provided for rough work.
5. No calculators or electronic pens are allowed in the examination room.
6. All answers must be written using a blue or black ball point pen or ink and Not Pencil. Only diagrams should be drawn in pencil.
7. Unnecessary changes of work will lead to loss of marks.
8. Do not fill anything in the box indicated "FOR EXAMINER'S USE ONLY" and those inside the question paper.

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

## SECTION A

1. Work out:  $2\ 0\ 3$

$$\begin{array}{r} 2\ 0\ 3 \\ +\quad 2 \\ \hline \hline \end{array}$$

2. Write nine hundred two thousand forty in figures.

3. Today is **Wednesday**, what day of the week was it 67 days ago?

4. Find the next number in the sequence below.

43, 42, 39, 33, 23,.....

5. Solve for n:  $\frac{3n}{3} - 1 = 5$



6. How many elements are in a set with 31 proper subsets?

7. Expand 85.37 using exponents.

8. Amos bought a dozen of face masks at shs. 5000. He later sold each face mask at shs 550. Calculate the profit he made.

9. Express  $400\text{cm}^2$  as square meters.

10. Change the evening time shown on the clock face below to 24 hour clock system.



11. What value does 7 represent in the numeral 90748?

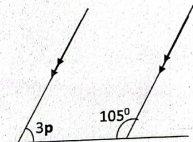
12. The bearing of town **N** from town **M** is  $320^\circ$ . What is the bearing of town **M** from **N**?
13. Work out the mean of  $3p$ ,  $7$ ,  $3$ ,  $2p$  and  $0$ .
14. Using a pair of compasses, a ruler and a sharp pencil, construct an angle of  $80^\circ$ .
15. Samson stood in a straight line of boys on a health parade. He was  $9^{\text{th}}$  from one side and the  $16^{\text{th}}$  from the other side. How many boys were on the parade?



16. In a class of 43 pupils, 19 of them are boys and the rest are girls. Draw tallies to represent the number of girls in the class?

17. Work out the G.C.F of 48 and 54.

18. Work out the value of angle  $p$  in the degrees

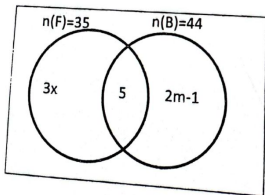


19. Convert  $0.2727\ldots$  to a common fraction in its simplest form.

20. A trader bought a dress at sh. 160,000 and sold it at sh. 200,000. Find the percentage profit.

**SECTION B:**

21. In the venn diagram below, 35 pupils like eating Fish (F), 44 pupils like eating Beans (B) and 5 pupils prefer eating both dishes. Study it carefully and use it to answer the questions.



- (a) How many pupils like eating fish only? (2mks)

- (b) Find the probability of picking a pupil who likes eating beans only to lead others in a prayer. (3mks)

22. John went to the market and bought the following items.

2 kgs of beans at sh. 2100 @ kg.

1kg and 500gm of posho at sh. 1200 a half kg.

18 packets of blue band at sh.6000 per 3 packets.

4 loaves of bread at sh. 6000.

- (a) Find the total expenditure of all items. (4marks)

- (b) If he was given a discount of 10%. How much money did he pay for all items?  
(2marks)



23. Three girls, Nankya, Nandu and Nambi shared a certain amount of money. Nankya got shs. 60,000, Nandu got shs. 90,000 and Nambi got 40% of the shared money.

(a) How much money was shared by the three girls altogether? (2mks)

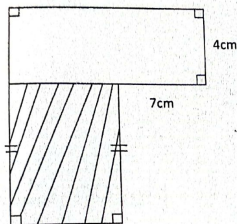
(b) How much did Nambi get? (3mks)

(c) What percentage of the total amount shared did Nankya get? (1mk)

24. In a class of 126 candidates,  $\frac{5}{9}$  of them are in stream A and the rest in stream B. If  $\frac{1}{5}$  of the candidates in stream A are girls and  $\frac{1}{7}$  of the candidates in stream B are boys, how many more boys than girls in the class? (5mks).



25. The perimeter of the unshaded region and the area of the shaded region on the diagram below are **32cm** and **44cm<sup>2</sup>** respectively. Work out the perimeter of the whole figure. (5mks)



26. The interior angle of a regular polygon is **120°** more than its exterior angle.
- (a) Find the exterior angle. (2mks)

(b) Calculate its interior angle sum. (2mks)

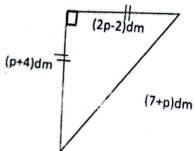


27. (a) With the help of a ruler, a sharp pencil and a pair of compasses only. Construct a quadrilateral PQRS where  $PQ=6\text{cm}$ , angle  $PQR=60^\circ$  and  $QR=PS=7\text{cm}$ . (4mks)

(c) Drop a perpendicular bisector from R to meet PQ at X and measure RX. (1mk)

28. (a) Solve for y:  $3(y+4)=24$  (2marks)

- (b) Calculate the total distance around the figure below. (3marks)



29. Debrah is 56 years old and her son is 8 years old.




(a) After how many years will Debrah be **thrice** as old as his son? (2mks)

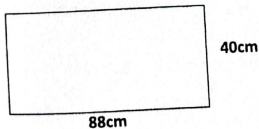
(b) How old will the son be then? (2mks)

30. A motorist covered the first part of the journey in  $2\frac{1}{2}$  hours at **72km/hr**. he then covered the remaining part of the journey in  $1\frac{1}{2}$  hours at **80km/hr**.

(a) Find the total distance covered by the motorist. (3mks)

(b) Calculate the motorist's average speed for the whole journey. (2mks)

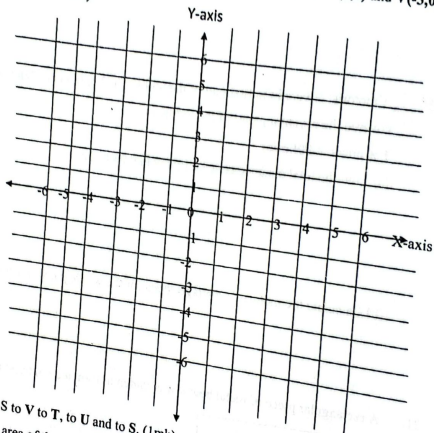
31. A rectangular piece of metal below was folded to form a cylindrical tank. 



(a) Find the radius of the cylindrical tank that was formed. (2mks)

(b) Work out the capacity of the tank above. (3mks)

32. a) plot the following points on the grid below (s(0,3), T(0-6), U(3,0) and V(-3,0) (6 by 6 grid) (4mks)



- (b) Join S to V to T, to U and to S. (1mk)  
Find the area of the geometric figure formed. (1mk)