

NAMBIRO ZONE EXAMINATION BOARD
2023 STANDARD 8MOCK EXAMINATIONS



MATHEMATICS

(100 MARKS)

Subject Name: M131

Time allowed: 2hrs

9:00 – 11: 00 am

NAME: (Surname First) _____

SCHOOL _____ **DATE:** _____

Instructions:

1. Write your name on the space provided
2. This paper consists of **two** sections; Section **A** and **B**
3. Encircle the letter representing the correct answer in Section **A** and answer all questions in Section **B** by writing your answers in the space provided after each question.
4. The use of electronic calculator is not allowed
5. Hand in your examination paper to the invigilator when time is called to stop writing.
6. In the table provided on this page, tick against the question number you have answered.

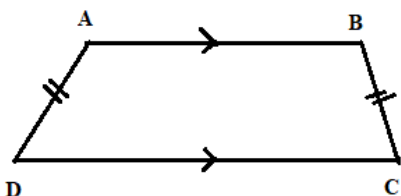
Question number	Tick 21 – 25 if answered	Do not write in these columns	
1 -10			
11 – 20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

SECTION A (40 MARKS)

MULTIPLE CHOICE





- Correct 10.00745 to 2 decimal places.
 A. 10.01 B. 10.00
 C. 10 D. 10.007
- What is **CMLIV** in Hindu-Arabic numeral?
 A. 955 B. 945
 C. 954 D. 1154
- In a school, 45% of the learners are girls. If there are 385 boys, calculate the total number of learners.
 A. 55 B. 325
 C. 430 D. 700
- Calculate simple interest on k800 at the rate of 10% per month for 3 months.
 A. K20 B. K240
 C. K320 D. K2400
- A bale of sugar was sold at k18 300 and the discount was k3000. What was its marked price?
 A. k15 200 B. k17 200
 C. k21 300 D. k20 200

Figure 1 shows a trapezium ABCD. Use it to answer question 6.



- What name is given to the types of a trapezium?
 A. Right angled trapezium
 B. Isosceles trapezium
 C. Quadrilateral trapezium
 D. Scalene trapezium
- Express 24 in prime factors.
 A. $2 \times 2 \times 3 \times 3$ B. $2 \times 2 \times 2 \times 3$
 C. $2 \times 3 \times 3 \times 3$ D. $2 \times 2 \times 2 \times 2$
- A company uses 20 liters of petrol per day. If petrol costs k150 per liter, how much does the company spend on petrol for 5 days?
 A. k 3, 000 B. k15, 000
 C. k30, 000 D. k45, 000
- Simplify $2x + 2a + x - a$
 A. $3x + a$ B. $4x - 2a$
 C. $3x + 3a$ D. $3x - 3a$

Study the information presented in the following table. Use it to answer question 10 and 11.

City	Trees planted
Zomba	
Lilongwe	
Blantyre	
Scale	 represents 20 trees

- How many trees were planted in Zomba?
 A. 6 B. 13
 C. 120 D. 60
- How many more trees were planted in Lilongwe than in Blantyre?
 A. 3 B. 60
 C. 70 D. 140
- A bus covered 60km in 30 minutes. What was its speed in km/hr.?
 A. 30km/hr. B. 2km/hr.
 C. 120km/hr. D. 240km/hr.
- There were 25.25m of cloth for sell. If 6 people bought 3.5 each, how many meters of cloth were not sold?
 A. 4.25m B. 5.5m
 C. 15.7m D. 3.75m

Table 1. Shows exchange rates of Malawi kwacha against foreign currencies in December 2022. Use it to answer question 14.

currency	buying	selling
Us Dollar (\$)	667	681
British pound (£)	860	881

- If a person exchanges \$20 and £ 15 to kwacha, how much money in Malawi kwacha did he get altogether?
 A. k26, 240 B. k13, 340
 C. k12, 900 D. k13, 350

15. Find the cost of $\frac{3}{4}$ m of cloth if 1m costs k1200.

- A. k900 B. k1600
 C. k600 D. k1900

16. A box has a square base of 5cm. if the volume of the box is 750cm^3 . Find its height

- A. 7.5cm B. 30cm
 C. 75cm D. 150cm

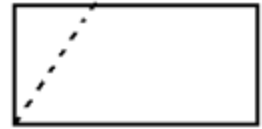
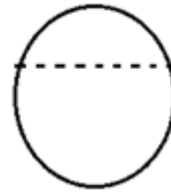
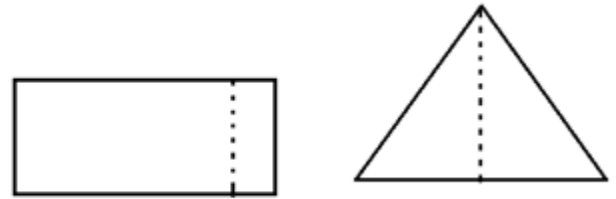
17. The length of a drawing of a door is 2.5 cm. if the scale used was $\frac{1}{6}$, find the actual length of the door.

- A. 5cm B. 10cm
 C. 12.5cm D. 15cm

18. Which of the following shapes show a line of symmetry?

A

B



C

D

19. The average age of 9 girls is 11.3 years. If a boy joins the girls, the average is 11.0 years. Calculate the age of the boy.

- A. 0.3 years B. 8.3 years
 C. 101.7 years D. 110 years

20. During one hour programme, there were 18min of talking and the rest was music. What percentage of the programme was music?

- A. 30% B. 42%
 C. 70% D. 90%

SECTION B (60 MARKS)

21. a. Solve the equation $x + 10 = 40$

(2 marks)

b. Yamikani had 36 oranges. After sometimes, $\frac{1}{9}$ of them went bad. He sold $\frac{3}{4}$ of the good oranges. How many oranges were left? **(5 marks)**

22. Calculate the compound interest on k40, 000 for 2 years at 5% per annum. **(6 marks)**

23. a. How many human generations are there in diamond jubilee? **(3 marks)**

b. Multiply the difference between 646.72 and 108.3 by 5.4. **(3 marks)**

24. Mrs Banda had K10,000. She used some to buy 3 pairs of shoes at K2 350 per 2 pairs, 6 units of biscuits for K1350.40, 5 units of pens at K55.50 each pen and $9\frac{1}{2}$ kg flour at k140 per kg she used the balance to pay water bills. How much was used to pay the bill? **(6 marks)**

25. Construct a parallelogram MNOP with $MN = 4$ cm, $NO = 6$ cm and angle $MNO = 65^\circ$ **(5 marks)**

The table below shows income tax rates. Use it to answer questions 26.

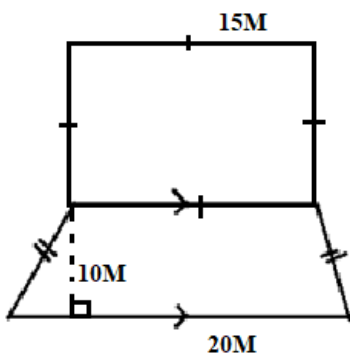
<u>Income per month</u>	<u>rate for tax</u>
First K20 000	0%
Next K 5 000	15%
Excess of (over) K25 000	30%

26. Calculate the income tax per month for a person whose salary per month is K80, 000. **(6 marks)**

27. Madalo lost 5% after selling a television set for K114, 000. Find the amount lost. **(5 marks)**

28. A bicycle tyre has a radius of 21cm. Find its circumference. **(5 marks)**

29. A school garden has a shape of a square and an isosceles trapezium as shown below.



NAME OF CANDIDATE: _____ EXAMINATION NUMBER _____

Find the area of the garden

(6 marks)

30. Mr Chisale had K40, 000 at the bank on 1st November 2019 and made the following transactions during the month.

1 November, cash in hand k50, 000

4 November, banked K55, 000

6 November, withdrew K35, 000

17 November, bought seeds K22, 000.

Prepare a cash book for Mr. Chisale and balance it.

(10 marks)