NGORA DISTRICT EXAMINATION BOARD

PRIMARY SEVEN MOCK EXAMINATION - 2023

SUBJECT : MATHEMATICS

DURATION : 2 hours 30 minutes

INDEX No

EMIS No						Personal No		

Name: _____

School: _____

District: _____

READ THE FOLLOWING INSTRUCTIONS CAREFULLY:

1. This paper has two sections: **A** and **B**.

2. Section **A** has **50** questions (50 Marks)

3. Section **B** has **5** questions (50 Marks)

4. Attempt all questions in both sections. All answers to both sections **A** and **B** must be written in the spaces provided.

5. All answers must be written in blue or black ball point pens or ink. Only diagrams and graph work must be done in pencil.

6. Unnecessary alteration of work will lead to loss of marks.

7. Any handwriting that cannot be easily read may lead to loss of marks.

8. Do not fill anything in the boxes indicated:

   "FOR EXAMINER'S USE ONLY"

Please turn over

1. Add:

$$
\begin{array}{r}
6\ 4\ 7 \\
+\ 5\ 3 \\
\hline
\end{array}
$$

2. Show the Hindu-Arabic numeral represented by **DCXLV** on the abacus below.

H   T   O

3. A baby slept at 8:30 am and woke up at 10:00am.
For how long did the baby sleep?

4. Without dividing, show which of the following numbers is divisible by 6;

652   or   618

5. Find the additive inverse of $^{+}8$

6. Using a ruler, a pencil and a pair of compasses only, construct an angle of 105^0.

7. Given that $a = -3$ and $b = 4$. Find the values of $2a + 2b$
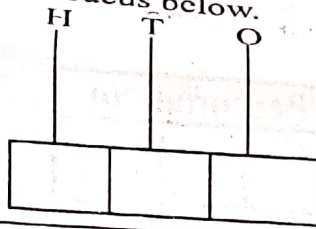
8. Change 82·95kg to grammes

9. Correct 247·356 to the nearest hundredth.

10. In a certain day at Koidike primary school, 824 pupils attended the morning session, 259 pupils missed the afternoon session. How many pupils attended the afternoon session?
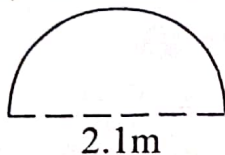
11. When $\frac{4}{9}$ of the journey is covered, 320km remained. Find $\frac{2}{3}$ of the whole journey.

②

12. Today is Wednesday, what day of the week will it be 2020 days to come?

13. Solve for **X** such that: $\dfrac{1}{7} = \dfrac{X}{35}$

14. Peter was asked to run through the arc once, what distance did he cover?

2.1m
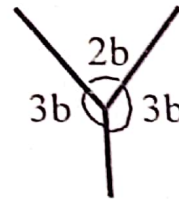
15. In a poultry farm, 30 eggs are packed on each tray. How many trays are needed to pack 3030 eggs?

16. Given that set
M ={all prime numbers less than 10}
How many proper subsets has set M?

17. Lydia sold a book at shs. 2,500 making a profit of sh. 500. Find her percentage profit.

18. Find the value of;
(2·5 x 1·5) + (2·5 x 8·5) using distributive property.

19. Find the value of b in the diagram.

2b
3b   3b

20. Simplify: 6 (r - 2) - 3 - (2r + 3)

21. In a class of 40 pupils, the number of pupils who like maths (M) is 18 less than the whole class, those who like English (E) are 2 more than those who like maths, y pupils like book while a fifth of the class like none of the subjects.

a) Represent the above information on the venn diagram below. (3mks)

n(Σ) = 40

n(M)   n(E)

y
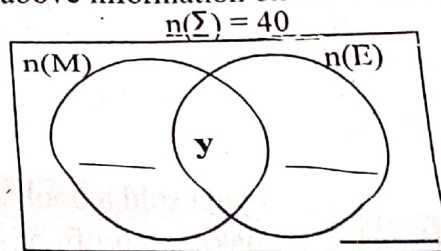
b) How many pupils like both subjects? (2mks)

22a) Find the median of:

$$\frac{1}{4} , \frac{3}{4} , \frac{5}{8} , \frac{1}{2} \text{ and } \frac{1}{12}$$ (3mks)

b) Find their range. (2mks)

23a) Workout: $\dfrac{0 \cdot 24 \times 0 \cdot 06}{0 \cdot 4 - 0 \cdot 04}$ (3mks)

b) What is the place value of digit 6 in the numeral 4·06? (1mk)

4

24. Mr. Abelun spent $\frac{1}{4}$ of his salary on clothing. $\frac{2}{3}$ of the remainder on food and the rest on drinks. Represent this information on a pie-chart of radius 4cm. (5mks)

25. The figure below shows a carpet laid on a room measuring 20m by 15m. Study and use it to answer the questions that follow.
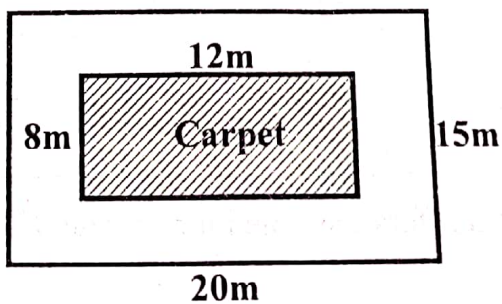
a) Find the area of the carpet

(02mks)

12m

8m | Carpet | 15m

20m

b) Calculate the area of the room left uncovered. (03mks)

26a) Show the mathematical statement `3 - 5 = -8` on the number line below. (3mks)

b) Workout ⁻8 - ⁻4 without using a numberline. (3mks)

27. At Aciisa primary school choir, the ratio of male participants to female participants is 2:5. If 6 more participants were included in the chair, the ratio becomes 4:5.

a) How many participants were in the chair? (2mks)

b) How many participants were in Aciisa p/s choir althogether? (2mks)

28. Opolot deposited sh. 750,000 in a SACCO that offers a simple interest rate of 18% per year.
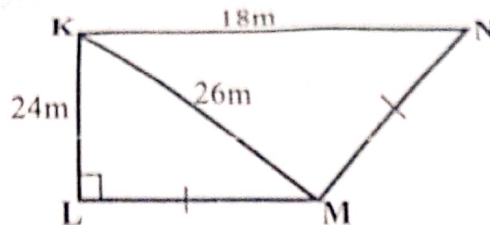
a) Find Opolot's simple interest after 6 months. (3mks)

b)   Calculate his total amount after 6 months.   (2mks)

29a) The diagram below is a quadrilateral KLMN. Find its perimeter.   (4mks)

b)   A minute hand is 7cm long. What distance will its trip cover in one hour? (2mks)

30a) Solve for **M**: $3m + 4 \leq 5m + 12$ (3mk)

                                                                    (2mks)
b)   Write the solution set for the above inequality.

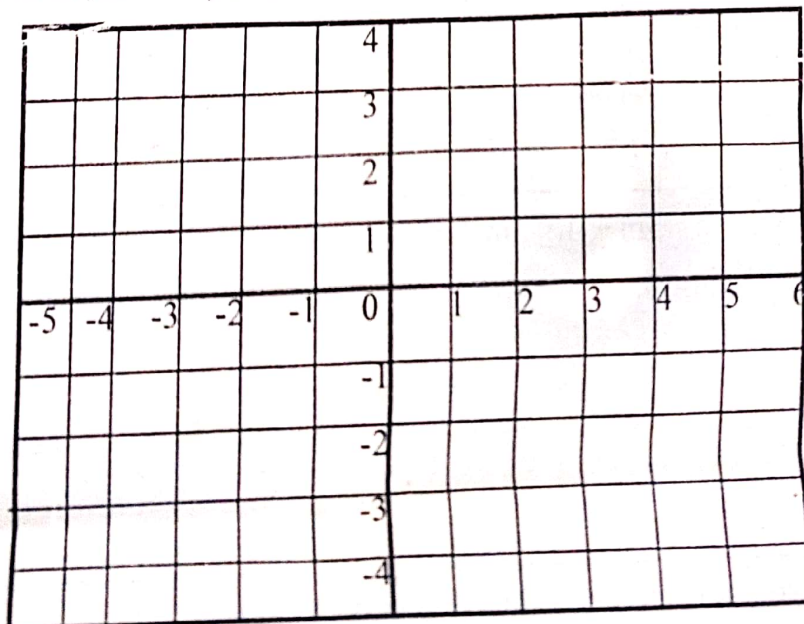31. Mr. **X** went to the market and bought the items in the table below.

ITEM	QUANTITY	UNIT COST	TOTAL COST
Salt	$1\frac{1}{3}$ kg	Sh. 900	Sh _____
Meat	_____ kg	Sh. 6,000	Sh. 9,000
Sugar	$\frac{1}{2}$ kg	Sh. _____	Sh. 4,700
TOTAL EXPENDITURE			Sh. _____

a) Complete his shopping table. (4mks)

32. On the grid below, plot the following co-ordinates;
W (-2 , 0) , **X** (0 , 3), **Y** (5 , 0) and **Z** (0 , -3).
Join W to X , X to Y , Y to Z and Z to W

b) Find the area of the figure formed after joing the above coordinates. (2mks)

GOOD LUCK

(8)