MOTHER'S LOVE PREPARATORY SCHOOL NDEJJE-KANAABA

END OF YEAR EXAMINATIONS, 2023

PRIMARY SIX

MATHEMATICS

Time allowed: **2 hours 30 minutes**

NAME: _____

SCHOOL: _____

CLASS: _____

Read the following instructions carefully:

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

2. Section **A** has 20 short questions (40 marks)

3. Section **B** has 12 questions (60 marks)

4. Answer **ALL** questions. All answers to both Sections A and B must be written in the spaces provided.

5. All answers must be written using a blue or black ball point pen or ink. Diagrams should be drawn in pencil.

6. Unnecessary alteration of work may 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.

SECTION A: (40 MARKS)

1. Work out:

$$\begin{array}{r} 33 \\ \times\ 3 \\ \hline \\ \hline \end{array}$$
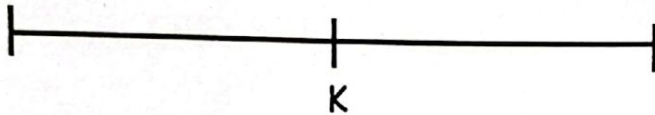
2. Write XLV in Hindu Arabic numerals.

3. Simplify: $7m - 2n + m + 3n$

4. Given that $P = \{a, d, t, n\}$ and $Q = \{a, k, n\}$

   Find $n(P - Q)$

5. Express 1001_{two} in decimal base.

6. Using a pair of compasses, a sharp pencil and a ruler only, construct a perpendicular line at point K.

```
|——————————|——————————|
           K
```

7. Simplify: $2\frac{1}{2} \div \frac{3}{4}$

8. The average mass of 3 boxes is 80kg. If two of them weigh 89kg and 86kg, find the mass of the third box.

9. Find the value of n if 2 − 4 = n(finite 5)

10. The L.C.M of two numbers is 120 and their G.C.F is 6. If one of the numbers is 24. Find the other number.

11. Simplify: $^-8 + {}^+3$ using a number line.

12. Find the next number in the sequence.

1, 3, 6, 11, 18, _____

13. A motorist drove at 48km/h for 30 minutes. Find the distance he covered.

14. Solve: $2(w - 3) = 18$

15. After selling a trouser for sh.45000, a trader realized a loss of sh.15000. How much did he buy it?

16. An examination of $2\frac{1}{2}$ hours began at 7:45am. At what time did it end?

17. Express 2350 hours in a 12 hour clock time.

18. A box contains 50 pens. If $\frac{3}{5}$ of them are blue and the rest are red, find the probability of randomly picking a red pen.

19. Express 500g as a percentage of 2kg.

20. Work out (75 x 12) + (12 x 25) using distributive property.

<u>SECTION B:</u>

21. Given the numeral. 9 6 7 0 5,

(a) Write it in words.

(2 marks)

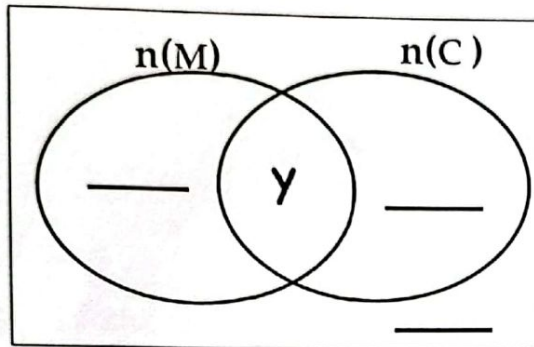(b) Round it off to the nearest thousands.

(2 marks)

(c) Divide the place value of 7 by 2.

(1 mark)

22. In a group, (2y + 3) pupils like matooke (M) only, y like both matooke and cassava, 15 pupils like cassava (C) while 4 pupils like none of the food stuffs.

(a) Complete the Venn-diagram below.   (3 marks)

(b)   Given that 30 pupils like only one food stuff, find the value of y.

(2 marks)

23. (a)   Using a ruler, a sharp pencil and a pair of compasses only, construct a triangle MTC such that MT = 6cm, MTC = 120^0 and TC = 5cm.

(4 marks)

(b)   Measure   TMC   (1 m...)

24. A certain amount of money was shared among three candidates Joan, John and Janine in the ratio of 3 : 4 : 7 respectively.

   (a)   If Janine got sh. 35000, how much money did they share altogether?   (3 marks)

   (b)   How much money did Joan and John get altogether?   (2 marks)

25. <u>A woman went shopping and bought these items as shown in the table below.</u>

Item	Quantity	Unit cost	Amount
Sugar	_____kg	Sh. 4000	Sh. 12000
Tea leaves	750gms	Sh. 2000	Sh. _____
meat	$2\frac{1}{2}$ kg	Sh. 14000	Sh. _____
		Total	Sh. _____

(a)   Complete the table.   (4 marks)

(b)   If she was given a discount of sh. 500, how much did she pay?

(1 mark)

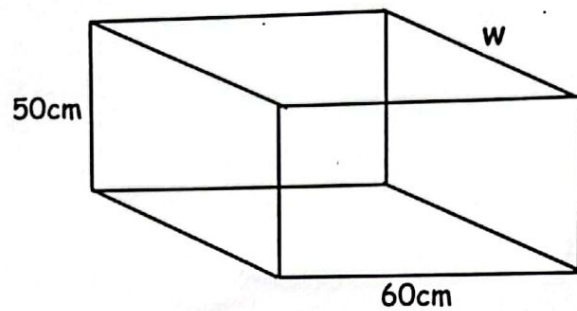26. (a)   Subtract (x - 4) from (4x + 7)   (2 marks)

(b)   Solve: 3(n + 2) – 2(n – 3) = 0   (3 marks)

27. The volume of the container below is $120,000cm^3$.

(a) Find the value of w. (3 marks)

(b) Calculate the total length of all its edges. (2 marks)

28. a) Workout: $\frac{1}{2}$ of $(\frac{1}{2} + \frac{1}{3}) - \frac{1}{24}$ (3 marks)

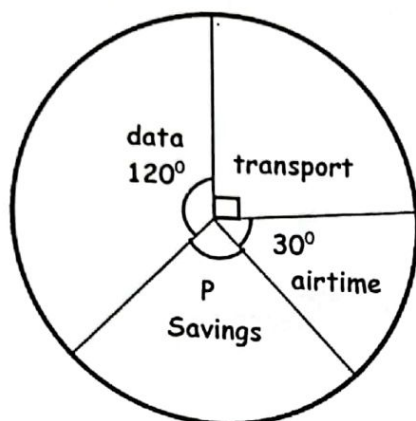b) Simplify: $\frac{0.74-0.5}{0.02x0.3}$ (3 marks)

29. (a) The sum of three consecutive even numbers is 18. If the smallest number is K, find the value of K.

(3 marks)

    (b)   Find their range.

(2 marks)

30. (a)   Subtract: $2\,1\,3_{five}$ from $4\,0\,4_{five}$

(2 marks)

    (b)   If $201_n = 51$, find the value of n.

(3 marks)

31. The pie-chart below shows how Mr. Odongo spends his weekly allowance of sh. 360,000. Study it carefully and use it to answer questions that follow.
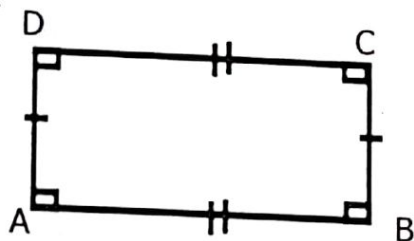

a) Find the value of p.   (3 marks)

(b) How much money does he spend on transport?   (2 marks)

32. In the figure below, AD $=(2x-1)$ cm, AB $=(3x+10)$ cm and DC $=(x+24)$ cm.

a) Find the value of x.

(2 marks)

c) Find the perimeter of the figure.

(3marks)

*************** END *****************

***** MERRY XMAS AND A HAPPY NEW YEAR***********