MUKONO DISTRICT EXAMINATIONS BOARD

PRIMARY SEVEN MOCK EXAMINATION 2024

MATHEMATICS

Time Allowed: 2 hrs 30 minutes

EMIS No.						Personal No.		

Index No. :

Candidate's Name: : .....

Candidate's Signature : .....

EMIS No: . : .....

School Name : .....

District Name : .....

Read the following instructions carefully.

1. The paper has two Sections **A** and **B.**
2. All workings for both sections **A** and **B** must be shown in the spaces provided.
3. Section **A** has **20** short questions **(40 marks).**
4. Section **B** has **12** questions **(60 marks)**
5. All working must be done using a blue or ball point pen or ink.
6. Diagrams should be drawn in pencils.
7. **No calculators** are allowed in the examination room.
8. Unnecessary **alteration** of work may lead to loss of mark.
9. Any hand writing that cannot easily be read may lead to **loss of marks.**
10. Do not fill in the boxes indicated; **"FOR EXAMINER' USE ONLY"** and those inside the question paper.

FOR EXAMINERS USE ONLY

QN. NO.	MARKS SCORED	INITIAL
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

Turn Over

SECTION A: (40 marks)

1. Workout :
$$\begin{array}{r} 96 \\ -\,32 \\ \hline \\ \hline \end{array}$$

2. Write 2024 in words.

3. Evaluate: $9^0 + 10^0 - Y^0$

4. Fill in the missing subsets of set K if

   K ={r, a, t}

   { }, {r, a} , {a, t}, _____,

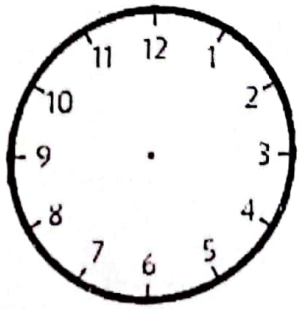
   {r, a, t}, _____, {a}, {r}

5. Find the next number in the sequence.

   2, 3, 5, 7, _____

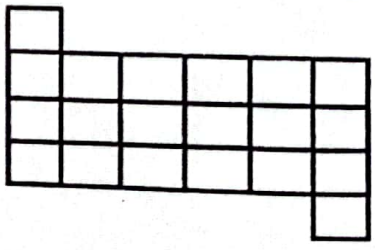
6. Simplify: $\bar{7} - \bar{3}$

7. Show "Twenty -five minutes to 3" on the 12 hour clock below.



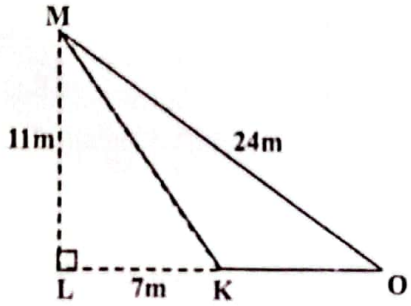
8. The mean of 4, 5, 0, x and 7 is 5. Find the value of x.

9. Shade: 3:4 of the diagram below.



10. Achieng is 18 years older than Babirye. Their total age is 48years. How old is Achieng?

11. Calculate the area of triangle MKO in the figure below if line LO=15m, LK = 7m and MO =24m

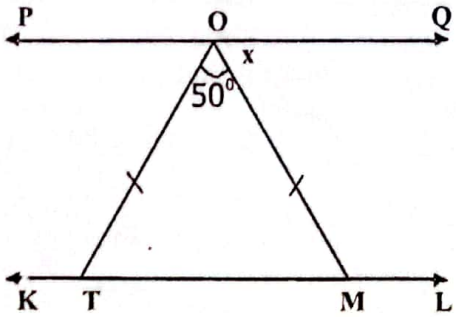


12. The Highest Common Factors (HCF) of two numbers is 10 and their Lowest Common Multiple (LCM) is 120. If one of the numbers is 40. Find the other numbers.

13. Given that b =ak, a =$^{-}$3, and k = $^{-}$4. Find the value of b(2a-k)

14. The circumference of a circle is 88dm. Find the radius of the circle. (**Use** $\pi = \frac{22}{7}$)

15. In the figure below, line PQ is parallel to line KL and OTM is an Isosceles triangle.

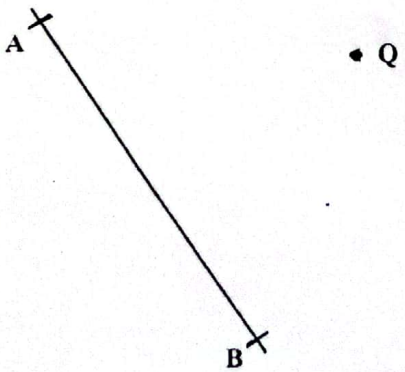


Find the size of x.

16. Five girls can weed a garden is 8hours. How long will two girls take to weed the garde working at the same rate?

17. Given that 🍅🍅 represents 8 tomatoes. How many tomatoes are represented by: 🍅🍅🍅🍅🍅

18. Using a pencil, a ruler and a pair of compasses , drop a line perpendicular to $\overline{AB}$ from point Q.



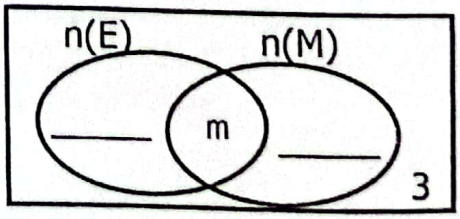
19. Solve for y : $3^y \times 3^2 = 27$

20. Bank notes in a bundle are numbered consecutively from CP6093214 to Cp6093315. If the notes are denominations of ten thousand shilling , how much money is in the bundle?

SECTION B: (60 MARKS)

21. In a class 15 pupils like English (E) only, m like both Math (M) and English (E) . (18+m) like Maths but not English while 3 like neither of the two subjects.

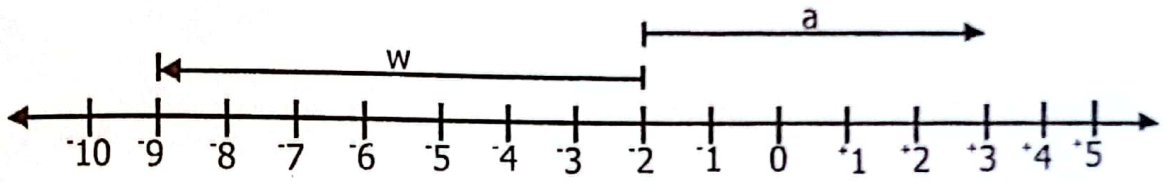
a) Complete the venn diagram below. *(2marks)*



ii) If 40 pupils like one subject only. Find the value of m. *(2marks)*

iii) Find a chance of picking at random a pupil who likes Maths. *(2marks)*

22. Study the number line below and answer questions that follow.



(2marks)

a) Write down the integers represented by the arrows.

i) w _____ ii) a _____

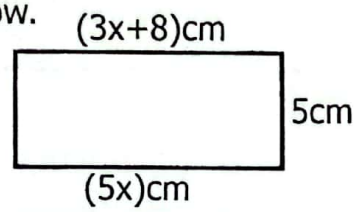
b) Draw an arrow 'q' to complete the sentence on the number line above. *(1mark)*

c) Work out the additive inverse of the integer represented by arrow marked 'q'. *(1mark)*

23. The sum of 4 consecutive multiples of 4 is 104. If the first number is m. What are these numbers? *(4marks)*

24. If $\frac{1}{3}$ of the spectators in a football field like Mirinda, $\frac{1}{4}$ of the remainder like Pepsi while the remaining 30 spectators like Coca cola. How many specators were in the field? *(5marks)*

25. a) The figure below is a rectangle. Study it and answer questions that follow.



a) Find the value of x. *(2marks)*

b) Calculate its area. *(2marks)*

c) Work out its perimeter. *(1mark)*

26. The sum of the values in the diagram below are the same Horizontally, Vertically, and Diagonally.

Find the value of each of the letters. *(5 marks)*

31	p	5	25
9	21	k	n
y	13	11	23
7	m	29	1

27. The table below shows the exchange rate of a Forex bureau.

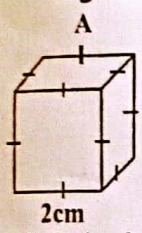
Currency	Buying	Selling
1 US dollar	3800	4000
1 Pound sterling	4500	4800
1 Kenyan shilling	35	40

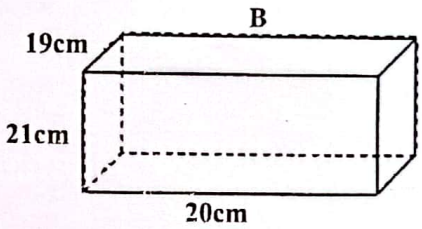
a) Juma was coming from USA with 250 dollars. How much did he have in Uganda shillings. *(2marks)*

b) Martha has to send her son's tuition to Britain. She has sh. 2,078, 400 to change. Find the amount of Pound sterling she will get? *(2marks)*

c) If one had 1600Ksh, how much would that be in US dollars? *(2marks)*

28. Antono, was given a task of packing small cubes (boxes) of type A into his big box B.





a) How many small boxes of type A will he pack in the box of type B? *(2marks)*

b) Calculate the amount of space left after packing? *(3marks)*

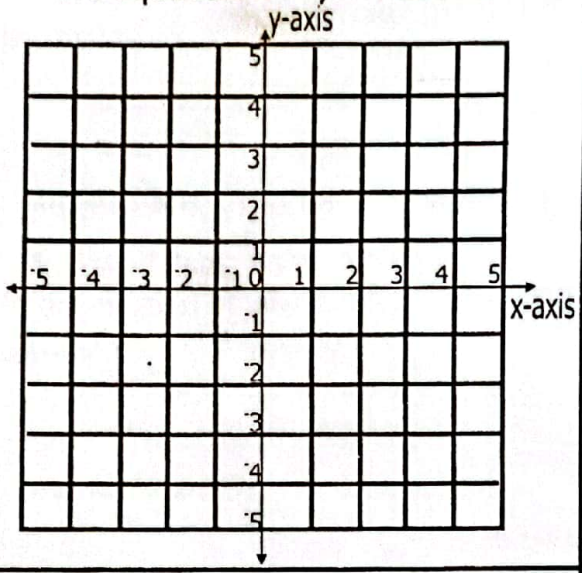
29. (a) With the help of a ruler, pencil and a pair of compasses only, construct a rhombus ABCD where AB=5cm and angle DAB=60°. *(3marks)*

b) Measure i) Length of diagonal AC *(1mark)* ii) Angle ABC. *(1mark)*

30. a) Given that x = y - 4, complete the table below.

x	-5	____	0	____
y	-1	1	____	6

b) On the grid below, draw a line for the equation x = y - 4 above.



31. The table shows a train journey from Tororo to Lira.

UGANDA RAILWAYS

Distance in Km from Tororo	Station	Departure	Arrival
0	Tororo	0800hrs	_____
56	Mbale	0945hrs	0900hrs
120	Kumi	1120hrs	1100hrs
160	Soroti	1410hrs	1300hrs
270	Lira	1850hrs	1800hrs

(a) What is the arrival time in Lira on the 12hour clock? *(1mark)*

(b) What is the distance in Kilometres from Kumi to Lira? *(1mark)*

(c) For how long did the train stop at Kumi? *(1mark)*

(d) Find the average speed of the train for the whole journey. *(2marks)*

32. (a) Workout $101_{two} + 11_{two}$. *(2marks)*

(b) Given that $102_{y} = 27_{ten}$. Find the missing base *(3marks)*