MASAKA UNITED SCHOOLS ACADEMIC BOARD (MUSAB)

PRIMARY LEAVING EXAMINATION SPECIAL MOCK– 2024

MATHEMATICS

Time: 2 hours 30 minutes

School: _____

EMIS No.						Personal No.		

Candidate's Name: _____

Candidate's Signature: _____

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

READ THE FOLLOWING INSTRUCTIONS CAREFULLY

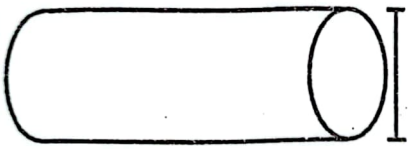
1. This paper has two sections A and B.
2. Section A, has 20 short questions (40mks)
3. Section B has 12 questions (60marks)
4. Answer all questions.
5. All answers to all questions must be written in the space provided.
6. All answers must be written using **blue** or ***black*** ball pen or ***ink***.
7. Unnecessary crossing of work will lead to loss of marks.
8. Any handwriting that cannot easily be read may lead to loss of marks.
9. Do not fill anything in the boxes indicated **"FOR EXAMINER'S USE ONLY"**

FOR EXAMINER'S USE ONLY		
QN. No.	MARKS	INITIALS
1 - 5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-28		
29-30		
31-32		
TOTAL		

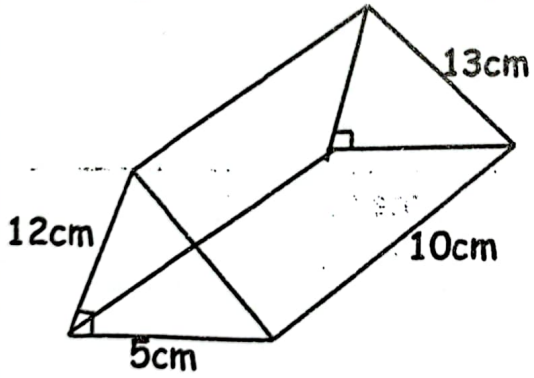
Turn Over

SECTION: A

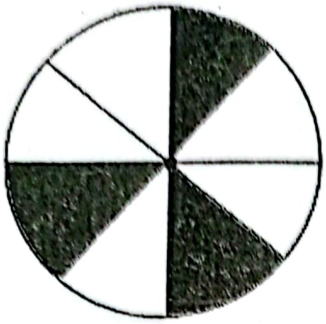
1.	Work out: $40 \div 4$	2.	Given that $Q = \{2, x, 7, d, 3\}$ and $P = \{5, a, 4, x, 6, c, d\}$ Find $n(P \cap Q)$
3.	Write in figures "Two thousand twenty -four"	4.	Find the next two numbers in the sequence below. 4, 6, 8, _____, 10, _____
5.	Work out: $-6 - -4$	6.	A school has a total of 600 pupils, if there are 360 boys. Find the ratio of girls to boys.
7.	The time shown on a clock face in a classroom is 10:15 a.m. What time will it be after 2 hours 30 minutes?		

8.	Solve: $P + \frac{1}{5}p = 6$
9.	A trader sold a bag of coffee at sh. 600,000 making a loss of sh. 120,000. What was the cost price of the bag of coffee?
10.	The diagram given below is a cylinder. Find the value of **h** in cm. **(3h - 7cm)**  **(2h - 3cm)**

11.	Using a ruler, a pencil and a pair of compasses only, construct the complementary angle of 60^0.	12.	Find the mean of $5, 7x, 6$ and $x - 3$

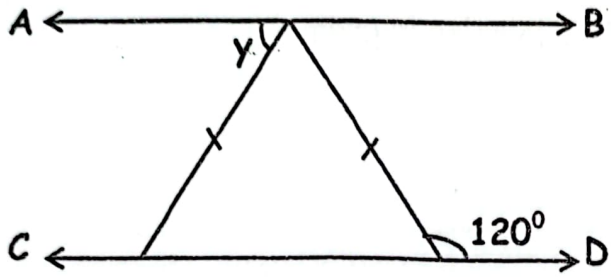
13.	Given that 8 books cost Sh. 4000. Find the number of books one can buy with sh. 10,000.
14.	A box weighs 36kg when full of curry powder and it weighs 6000g when empty. Find the weight of curry powder in grams.
15.	The diagram below is a triangular prism. Find its base area. 
16.	Express 45 seconds as a percentage of 3 minutes.

17. The diagram below is devided into equal parts.



Find the fraction of the diagram not shadded

18. In the diagram below AB to $\overrightarrow{DC}$. Find the value of angle marked y.



19. Work out: $111_{three} + 121_{three}$

20. Musa had $\frac{2}{3}$ of his sugarcane, he gave $\frac{1}{2}$ of it to his friend. What fraction did he remain with?

SECTION: B (60 Marks)

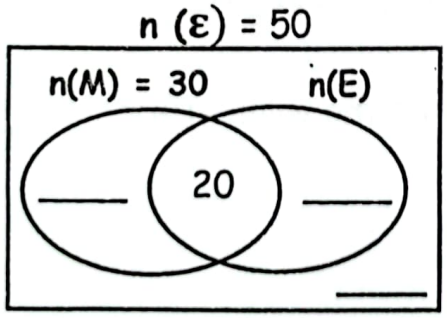
21. Anita sold a dress at shs. 60,000 to Grace, she realised a loss of sh. 20,000.

(a) Calculate Anita's percentage loss. **(3mks)**

(b) If Grace sold the same dress to Nandutu at a profit of 15%. How much did Nantudu pay for the dress? **(3mks)**

22. In a class of 50 pupils, 30 pupils like Mathematics (M), 20 pupils like both Mathematics and English (E). 3k like English only whereas k like none of the two subjects.

(a) Use the information to complete the Venn diagram below. **(3mks)**

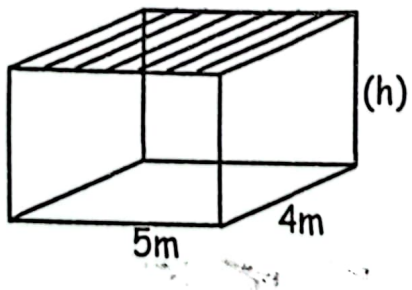


(b) Given that the number of pupils who do not like Mathematics at all is 20. Find the value of k. (2mks)

23. (a) Construct a parallogram NARO in which NA = 8cm, < NAR = 120^0 and $\overline{AR}$ = 5cm. (4mks)

(b) Measure diagonal $\overline{NR}$ = _____ (1mk)

24. A wire of total length 60m was used to make the Edges of the cuboid below.

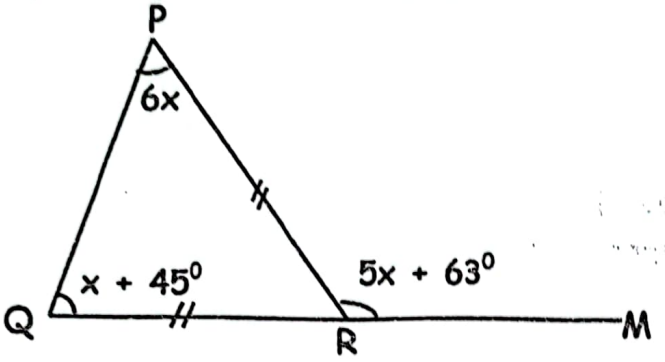


(a) Find the value of h. (3mks)

24.	(b) Calcualate the area of the shaded face. (2mks)
25.	The sum of five consecutive odd numbers is 35. If the middle number is p. Find the middle number. (4mks)
26.	Tom takes 6 days to clear a piece of garden, Stephen takes 12 days to clear the same piece of garden. (a) If both are employed to work together at the same rate, how many days will they take to clear the same piece of garden? (3mks)

(b) What fraction of the garden will remain if both work for 3 days? (2mks)

27. Study the figure below and use it to answer the questions about it.



(a) Find the value of x. (2mks)

(b) Calculate the size of angle PRQ. (3mks)

28.	Mpuuga travelled from Kampala to Masaka at a speed of 60km/h in 3 hours . He then rested at Masaka for an hour and continued to Mbarara at a distance of 130km in 4 hours. (a) Calculate his average speed for the whole journey. **(3mks)**
	(b) If his car used 5 litres of petrol for every 10km. how many litres of petrol did he use from Masaka to Mbarara? **(2mks)**
29.	Given 1245 is a number (a) Write the number in words. **(1mk)** (b) Expand the number using place values. **(2mks)**

(d) Express the number in standard form. (2mks)

30. (a) Given that p = 2, q = 4 and r = 3. Find the value of pq – r. (2mks)

(b) Solve for a : 4(3 –a) – (8 – a) = 7. (3mks)

31. The table below shows the number of mangoes collected by pupils of Ssenyange Education Centre from their garden.

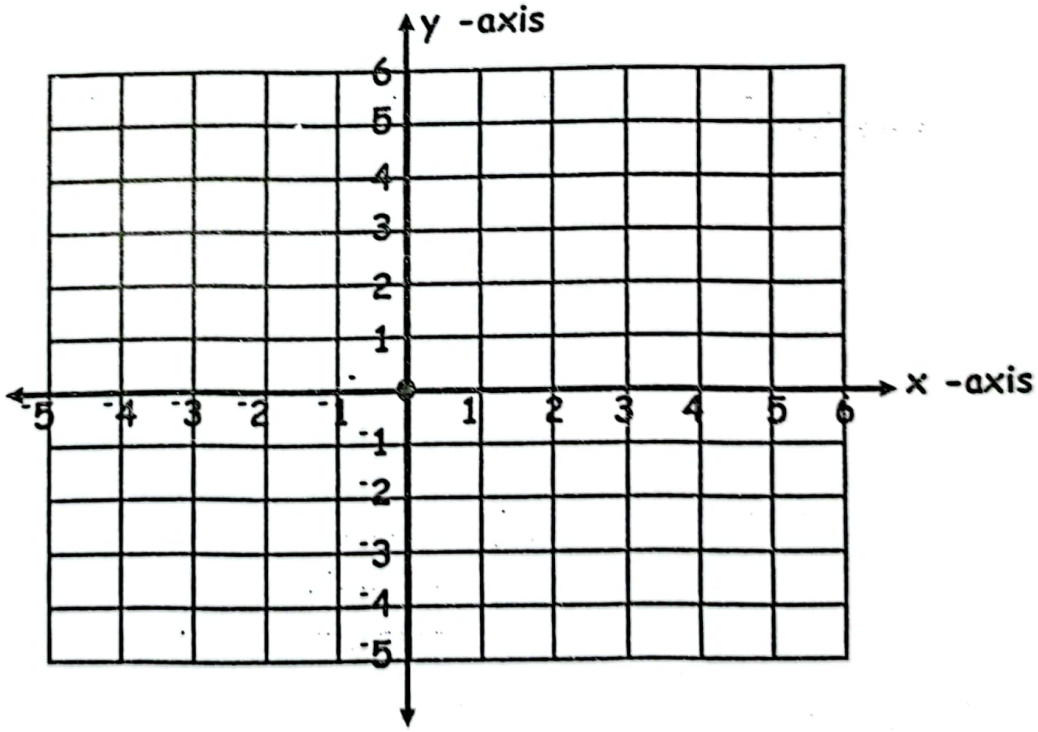
Mangoes per collection	35	50	70	80	90
No. of pupils	2	2	3	1	2

(a) How many pupils collected mangoes from the garden? (1mk)

(b) Find the range of mangoes collected. (1mk)

(c) Calculate the average number of mangoes collected. (3mks)

32. Below is the co-ordinate graph. Use it to plot the points (4mks)
P (-3, 2), M(2, 2), R (2, -3), Q (-4, -3)



(b) Join P to M to R to Q to P. (1mk)

(c) Name the figure formed. (1mk)

END