MASAKA UNITED SCHOOLS ACADEMIC BOARD (MUSAB)

PRIMARY LEAVING MOCK EXAMINATION– 2023

MATHEMATICS

Time: 2hours 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

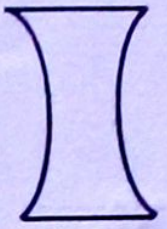
1.	Work out: $13 + 21$	2.	Write 39 in Roman numeral.
3.	Given set; Set $P = \{1, 2, 3, 6\}$, $T = \{1, 3, 5, 7\}$ Find $n(P \cap T)$	4.	Work out: $-5 - -8$
5.	Using a pair of compass, and a ruler, construct an angle of 30^0	6.	Solve the equation $2(2x - 1) - (2x - 2) = 8$
7.	What number has been written in standard form to get 8.3×10^{-2}?		

8. The dresses price was decreased in the ratio of 2:5. If the marked price was shs. 75,000. What is the new price of the dress?

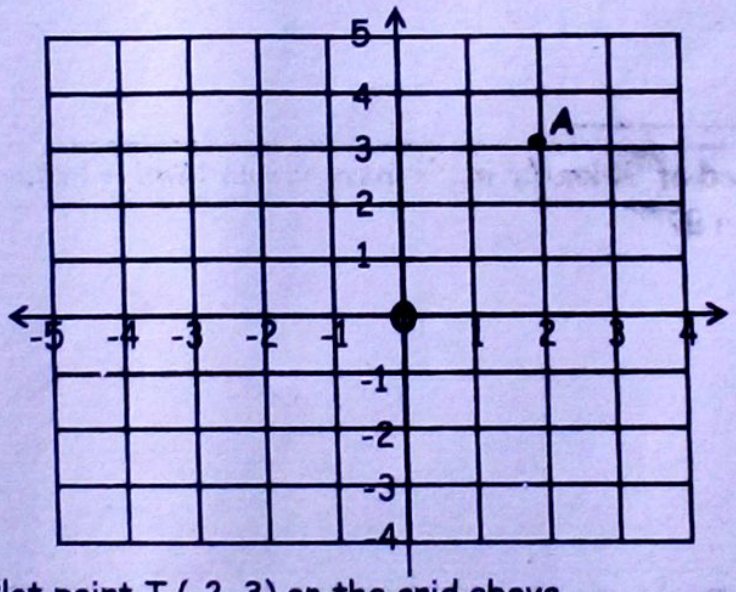
9. Juma's father had a bundle of 100 notes numbered from AP845201. Find the identifying number of the last note in the bandle.

10. Use the clock face below to tell the evening time.

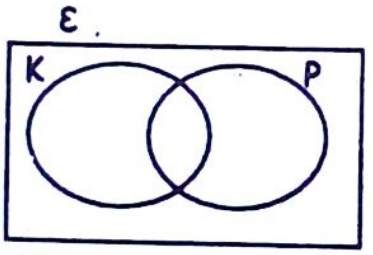
11. How many lines of folding symmetry does the figure below have?

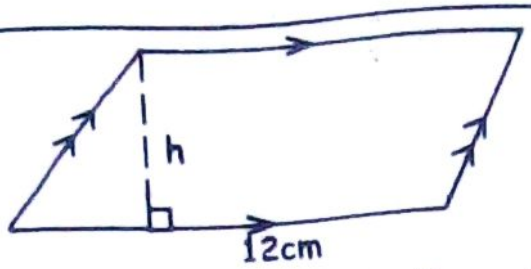


12. Study grid below and answer the questions that follow.



(a) Plot point T (-2, 3) on the grid above.

	(b) Give the cordinates of point A as indicated on the above gride.	13.	Divide 0.45 ÷ 0.3
14.	A 50kg sack of sugar was packed in half kilogram packets. Find how many such packets were packed to its completion.		
15.	On the Venn diagram below, shade the complement of (P – K) 		
16.	A taxi moved at speed of 90km/hr in 2 $\frac{1}{2}$ hours from town A to town B. How far is town A to town B?		



17. Given that, the area of the figure above is 60cm^2. Find its height.

18. If today is Wesdnesday. What day of the week was it 38 days ago?

19. Find the next number in the sequence below;

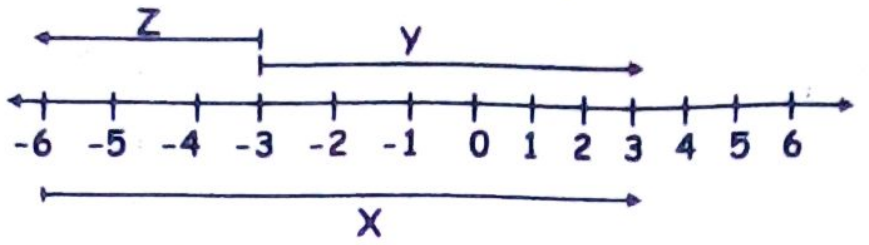
33, 22, 15, 10, 7, _____

20. The table below shows points scored in a P.7 debate between boys and girls as shown below, use it to complete the missing number and tallies.

	Points	Tallies
Boys	15	_____
Girls	_____	𝍸 𝍸 |

SECTION: B

21. Use the numberline below to answer the questions that follow:-



(a) Write the value of the letters indicated on the arrows. **(1mk each)**

(i) Z _____

(ii) Y _____

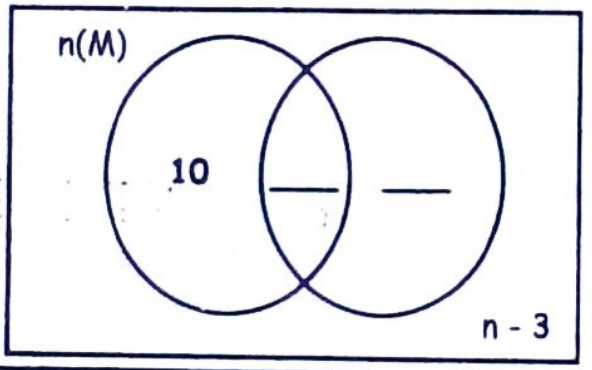
(iii) X _____

(b) Wr te the mathematical sentence of the above numberline. **(2mks)**

22. In a class, 10 pupils like Maths (M) only, (n + 5) like both subjects and (n-3) pupils do not like any of the two subjects, 12 pupils do not like Maths.

(a) Use the above information to complete the Venn diagram below.

$n(\mathcal{E}) = K$ **(1mk)**



b) Find the value of n. **(2mks)**

If 20 pupils like Mathematics

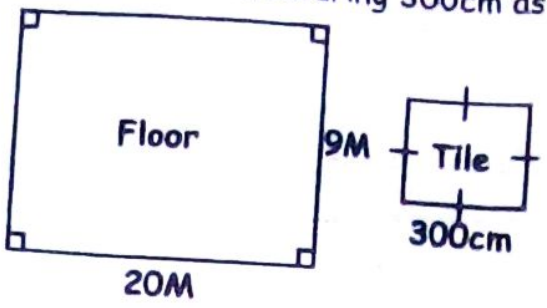
c) Calculate the value of k. **(1mk)**

23. Jesca went shopping with 3 ten thousand shillings and bought the items as shown on the bill. Study it and complete the table if she remained with shs. 4000. **(6mks)**

Item	Quantity	Unit cost	Amount
Sugar	2kg	Shs. 5000@	Shs. _____
Rice	1 ½ kg	Shs. _____	Shs. 9000
Tomatoes	15 tomatoes	_____ for every 5 tomatoes	Shs. 3000
Bread	_____ loaves	Shs. 4000 per loaf	_____
		TOTAL	_____

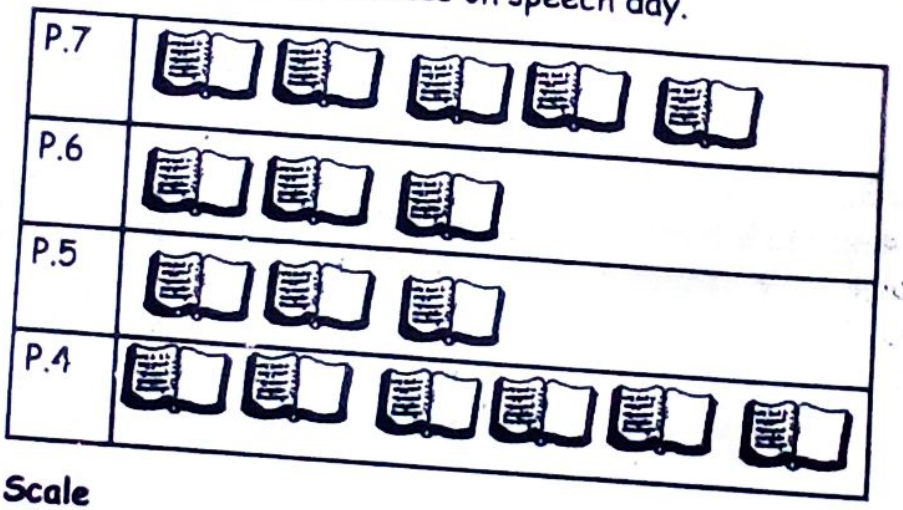
24. Two tops A and B are connected on a water tank whereby tap A takes 4 hours to fill the tank and tap B takes 6 hours to draw water from the tank. If both taps are left open at the sametime. For how long will it take for the tank to get full of water? **(4mks)**

25. A rectangular floor measuring 20metres long and 9 metres wide is to be covered with square tiles measuring 300cm as shown below.



Calculate the total number of tiles needed to cover the floor. **(5mks)**

26. The graph below shows the number of Mathematics textbooks that were donated to different classes on speech day.



Scale

 **20 books**

(a) How many books did P.7 get? **(1mk)**

	(b) Which class got the highest number of books? **(1mk)**
	(c) Workout the cverage number of books donated for all classes. **(3mks)**
27.	(a) Sarah is 26 years older than Jane. If their total age is 50 years, how old will Jane be in 3 years time? **(3mks)**
	(b) Simplify: 6p - 2t - 3t - 3p **(2mks)**

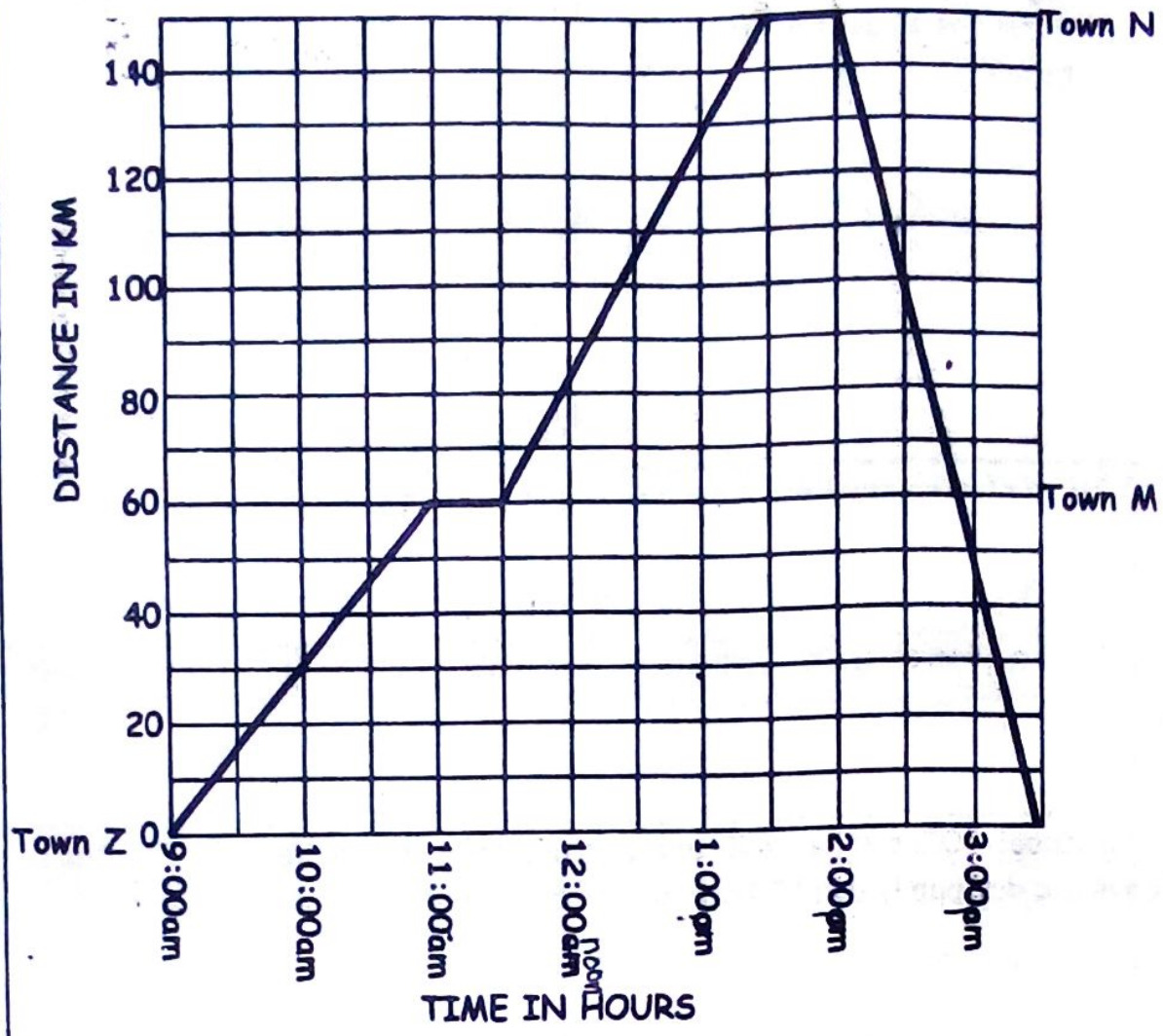
28.	(a) Evaluate: $2^5 \times 2^{2p} = 32$. **(3mks)**	(b)	Use the distributive property to workout; $(72 \div 6) - (30 \div 6)$ **(2mks)**

29. Using a pair of compasses, a ruler and a sharp pencil only. Construct a triangle ABC where AB = 6cm, $<BAC = 60^0$ and $< ACB = 45^0$. **(4mks)**

(b) Measure $\overline{AC}$ _____ **(1mk)**

30.	Given the digits 5, 1, 8 and 0 use them to; (a) (i) form the largest 4 - digit number. **(1mk)**	ii)	Write the smallest 4 digit number in words. **(2mks)**
	(b) Round off the smallest 4 digit number formed to the nearest hundreds. **(2mks)**		
31	In a school, 60% of the pupils are girls and the rest are boys. If $\frac{1}{4}$ of the boys are day pupils and 120 are boys in boarding section. (a) How many pupils are in the school altogether? **(4mks)**		
	(b) How many more girls are there than boys? **(1mk)**		

32. The distance time graph (travel graph) shows Denise's journey from town Z to town N to town N via town M. Use it to answer the questions that follow.



(a) How far is town N from town Z? **(1mk)**

(b) How long did Denise take to travel from town Z to town M? **(2mks)**

(c) For how long did Denise rest at town N? **(1mk)**

(d) At what time did Denise resume her journey after a stop over at town M? **(1mk)**