MITYANA MUNICIPAL ACADEMIC COMMITTEE

P. L. E. MOCK EXAMINATION 2023

MATHEMATICS

Time: Allowed 2 Hours 30 Minutes

EMIS No.						Personal No.		

Candidate's Name: _____ Signature: _____

READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. Do not open this booklet until you are told to do so.
2. This paper comprises two sections A and B.
3. Section A has 20 questions (40 marks)
4. Section B has 12 questions (60 marks)
5. The paper has 12 pages altogether.
6. All answers to both sections A and B MUST be written in the spaces provided
7. All answers must be written in blue or black ballpoint pen or ink.
8. No calculators are allowed in the examinations room.
9. Diagrams and Graph work must be done in pencil strictly.
10. Unnecessary alteration of work will lead to loss of marks.
11. Any handwriting that cannot easily be read may lead to loss of marks.
10. Do not fill anything in the boxes indicated "**FOR EXAMINERS USE ONLY**" and those inside the question paper.

FOR EXAMINER'S USE ONLY		
QN. No.	MARKS	INITIAL
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

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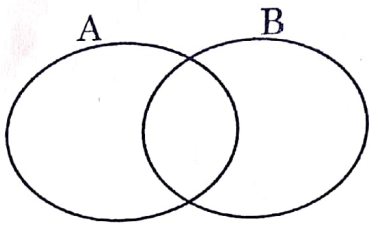
SECTION A 40 marks.

1.	Subtract 13 from 44.	2.	Shade A^1 - B 
3.	Find the next number in the sequence; 125, 64, 27, _____	4.	Write 196 in Roman numerals.
5.	**Simplify:** $\frac{5}{6} - \frac{3}{4}$	6.	Calculate the speed a motorist covered in a distance of 30km in 45 minutes.

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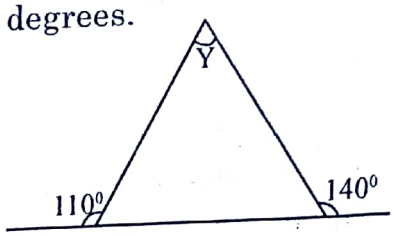
7.	Simplify: 6k + 4p - 3k - 5p	8.	Calculate the value of angle y in degrees. 
9.	Workout 7 + 6 using a numberline.	10.	Find the mean of 3, 4a, 8 and 5
11.	What number has been expanded to give; $(2 \times 10^{-2}) + (5 \times 10^{2}) + (7 \times 10^{1}) + (3 \times 10^{0})$	12.	Simplify; $9^{0} + 9^{4}$

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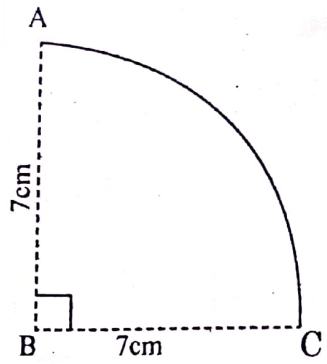
13. A primary seven teacher gave a quarter of a big chapati to his pupils during break time. If he gave out 16 chapatis, how many pupils did he serve?

14. Find the length of arc AC of the quadrant drawn below.



15. Using a pair of compasses, a ruler and a well sharpened pencil only, construct a reflex angle of 210^0.

16. Fill the magic square below.

v	9	5
8	4	y
6	2	7

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17.	Nalubega was given a bundle of one thousand shillings numbered from PR447500 to PR447699. How much did she get?	18.	If today is Tuesday. What day of the week was it 47 days ago?
19.	What is the difference between the place value of 2 and the value of 4 in digits 94312?	20.	Joan bought 2 dozens of pencils each at Shs. 4800 and later sold each pencil at Shs.350. Find the loss she made from the sale of a pencils.

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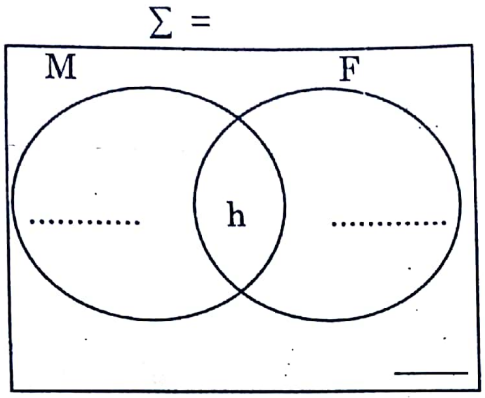
SECTION B (60 marks)

21. During primary seven leavers' party, all the 39 boys ate Matooke (M) (h + 3) ate matooke and Meat only, (5h - 11) ate matooke and fish (F) only, h boys ate all the three dishes and 5 boys ate only matooke.

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



b) Find the value of h ?

22. Work out $1230_{five} - 24_{five}$ and write your answer in words.

b) Change 0111 in binary base to octal base.

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23. A teacher wards 4 marks for a correct answer and deducts a mark for every wrong answer.

a) If a pupil gets 12 correct answers in a test of 20 questions, how many marks does he get?

b) If pupils get 60 marks in a test of 30 questions, how many wrong answers will he have got?

24. In a market the cost of a pawpaw is Shs.800 more than the cost of a mango. A mango costs two thirds the cost of a pineapple. The total cost of three fruits is Shs.4300. Calculate the cost of a pineapple.

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25. The table below shows how a motor cyclist travelled from village K to village N thought village L and M. Study and use it to answer questions below.

Villages	*Departure*
Village K	*Departure: 9:00am*
Village L	*Arrival: 10:45am* *Departure: 11:00am*
Village M	*Arrival: 12:05am* *Departure: 1:05pm*
Village N	*Arrival: 2:30pm*

a) At what time did the motor cyclist leave village K?

b) How long did the motor cyclist take to travel from village K to village N?

c) Find the total stoppage time of the motor cyclist.

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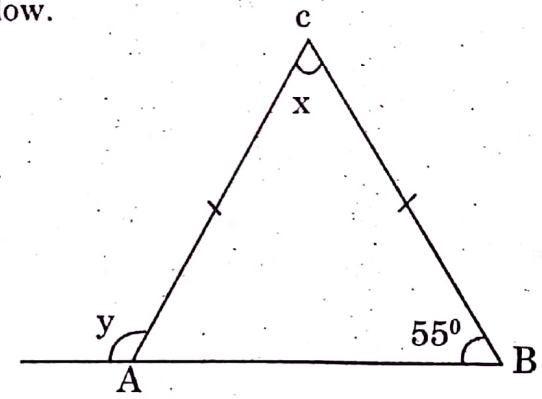
26.	In a class, the ratio of pens to books to pencils is 4:6:7 respectively. If the total number of books and pencils is 39.		
a)	How many pencils are in the class?	b)	Find the number of books in the class.
27.	Study the diagram below. 		
a)	Find the size of angle marked x	b)	Calculate the size of angle marked y?
c)	What name is given to triangle ABC above?		

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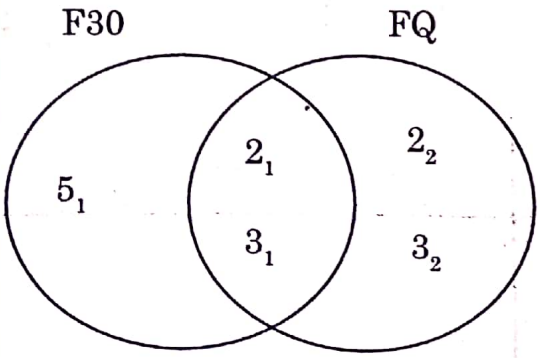
28. Study the table below and use it to answer questions that follow.

Marks scored	70	80	R	95
No. of pupils	4	2	3	1

a) How many pupils did the test?

b) Calculate the value of R if the mean score was 80.5.

29. The Venn diagram below shows the prime factors of two numbers P and Q. Use it to answer questions (a) and (b) below.



a) Find the number represented by Q

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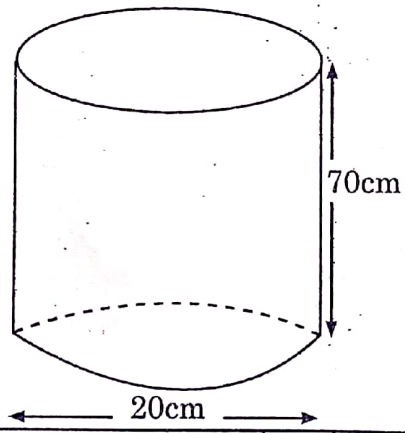
b)	Find the GCF of Q and 30	c)	The GCF and LCM of two numbers are 3 and 18 respectively. If one of the two numbers is 6, Find the other number.
30.	Study the figure below and answer the questions that follow. 		
a)	Find the volume of the figure $\left(\prod = \frac{22}{7}\right)$	b)	Find the number of litres it holds when ½ full.

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31.	A woman went shopping and bought the following items in preparation of her party. 20 mangoes at Shs. 6,000 for every three mangoes. 2½ kg of fish at Shs. 20,000 per kg. 2kg of meat at Shs. 12,000 per kg 500gm of butter at Shs. 20,000 per kg 5 litres of milk at Shs. 10,000		
a)	Find the total amount of her bill.	b)	If she was given a discount of 10%, find how much she paid.
32)	Using a ruler, a pencil and pair of compasses only, construct a triangle PQR in which line PQ = 6cm, angle PQR = 60^0 and Angle RPQ = 45^0.		
b)	Drop a perpendicular line from point R to meet line PQ at n	c)	Calculate the area of triangle PQR.

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End