KOLFRAM EDUCATIONAL SERVICES KAMPALA

THE KOLFRAM EXAMINATIONS BOARD

PRE MOCK SET VIII EXAMINATION 2023

MATHEMATICS

*Time allowed: **2** hours **30** minutes*

Index Number:	**Random Number**						**Personal Number**		

Candidate's Name:.....

Candidate's Signature:.....

School Name: .....

District Name:.....

DO NOT OPEN THIS BOOKLET UNLESS YOU ARE TOLD TO DO SO

Read and follow these instructions carefully:

1. This paper has **two** sections: **A** and **B**. Section A has **20** questions and section B has **12** questions. The paper has **10** printed pages.
2. Answer all questions. **All** answers to both sections **A** and **B** must be shown in the spaces provided.
3. All answers must be written using a **blue** or **black** ball point pen or ink. Any answer written in pencils other than on graphs and diagrams will not be marked.
5. No calculators are allowed in the examination room.
6. Unnecessary changes in your work and handwriting that cannot easily be read may lead to **loss of marks**.
7. Do not fill anything in the table indicated: "**FOR EXAMINERS' USE ONLY**" and boxes inside the question paper.

FOR EXAMINER'S USE ONLY		
QN. NUMBER	MARKS	EXAMINER'S 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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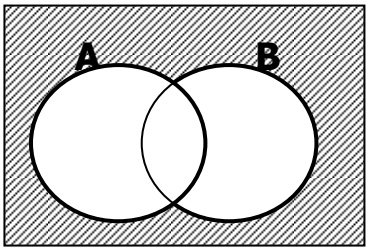
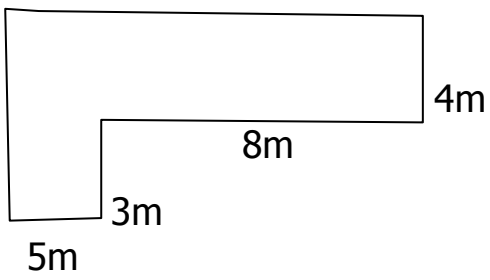
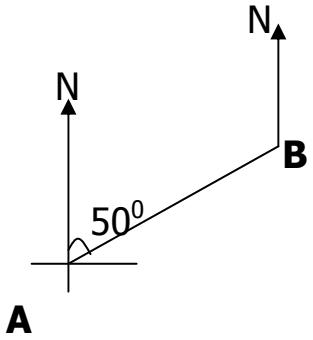
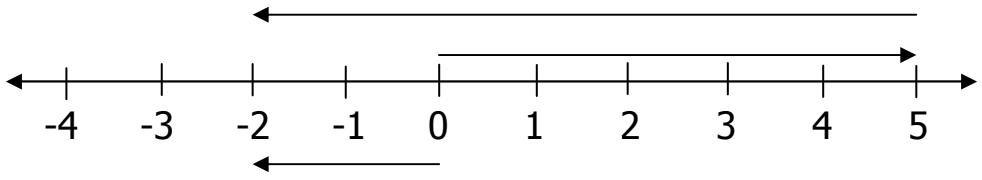
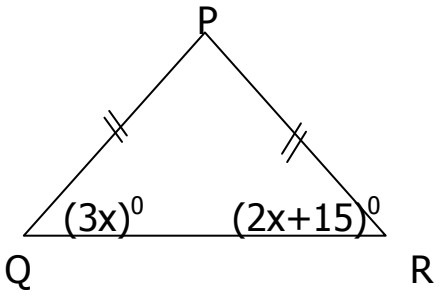
SECTION A: (40 MARKS)

	Work out: 2 4 0 + 5 8 _____	2.	Write 149 in Roman numerals.
3.	Describe the shaded region.  	4.	What is the cost of 250 grams of sugar at 3200 per kg?
5.	The average of 5 numbers is 20. Find the sum of the numbers.	6.	Work out: $\frac{1}{9}$ x $\frac{3}{5}$
7.	A meeting started at 8:30 a.m. and lasted 50 minutes. At what time did it end?	8.	Solve the inequality: $2x + 4 \leq 6$
9.	Using a pair of compasses, a pencil and a ruler only, construct parallel lines 3cm apart.		
10.	What is the square root of $12\frac{1}{4}$?	11.	Decrease 420 books by 30%

	Work out: $1\ 1\ 0_{two}$ x $1\ 1_{two}$		If today is Wednesday, what day of the week will it be 23 days from now?
	Find perimeter of the figure below.  		What number is expanded to give; $(2 \times 10^3) + (7 \times 10^2) + (5 \times 10^1) + (8 \times 10^0)$
	Find the bearing of A from B.  		
	How many bottles of water each 0.5 litres can be filled from a water tank of 50 litres?		Work out: $6p^8 \div p^3$
	12 technicians can paint a school building in 10 days. How long will 15 technicians take?		
	20. Write the mathematical statement shown on the number line below.  		

SECTION B

21 Study the diagram below and answer questions that follow.



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

(b) Find the size of angle QPR in degrees. *(3 marks)*

22a) Simplify: $\frac{0.027 \times 0.16}{0.08 \times 0.9}$ *(3 marks)*

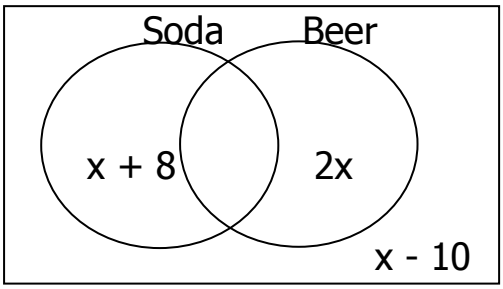
(b) Work out: $1\frac{1}{2} + \frac{3}{4} \div 1\frac{1}{2}$ *(3 marks)*

23. **The table below shows marks scored by different pupils. Study it and answer the questions that follow.**

Marks	35	40	50	70	90
No. of pupils	2	3	2	2	1

(a) Find the median mark. *(2 marks)*

(b)	Find the modal mark. *(1 mark)*		(c) Find the mean mark. *(2 marks)*
24	a) Write 824.57 in expanded form using powers. *(2 marks)*		(b) Write 2 2 2 2 2 in words. *(1 mark)* (c) What is the place value of 3 in the number 321_{five}? *(1 mark)*
25	At Jinja Bus park, buses travelling to Mbale and Kampala leave after every 40 minutes and 30 minutes respectively. The first buses to the two towns leave together at 10:00 a.m. At what time will buses to the two towns leave Jinja together again? *(5 marks)*		

	The venn diagram below shows people at a birthday party who like soda or beer or any other drink. (a) Find the value of x if x – 4 like both types of drinks and 40 people like soda.  *(2 marks)*
	(b) How many people like beer? *(2 marks)* (c) How many people like soda only? *(1 mark)*
27	a) Using a ruler, a pencil and a pair of compasses only, construct a parallelogram PQRS such that line QR = 7cm, and line PQ = 5cm, angle Q = 60^0. *(4 marks)*
	(b) Measure the diagonal QS. *(1 mark)*

28. A farmer sells $\frac{1}{2}$ of the daily milk collection from his farm. He gives $\frac{2}{5}$ of the remaining amount of milk to his parents and remains with 9 litres for his family.

How many litres of milk does he collect daily? *(5 marks)*

Okot bought the following items from the market.

3kg of sugar at shs. 3400 per kg.
1 ½ kg of rice at shs. 3600 per kg.
1500 grams of maize flour at shs. 3000.
8 mangoes at shs. 500 each.

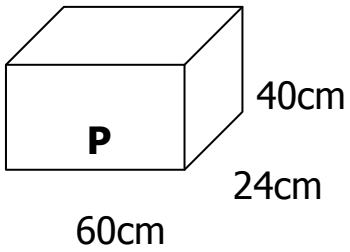
(a) Calculate his total expenditure. *(4 marks)*

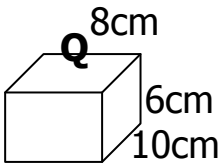
(b) Find his change if he had shs. 30000. *(1 mark)*

30 Solve: $p - 1 = 2p + 5$ *(2 marks)*

Solve for y: $\frac{2y + 2}{3} = \frac{y + 3}{2}$ *(3 marks)*

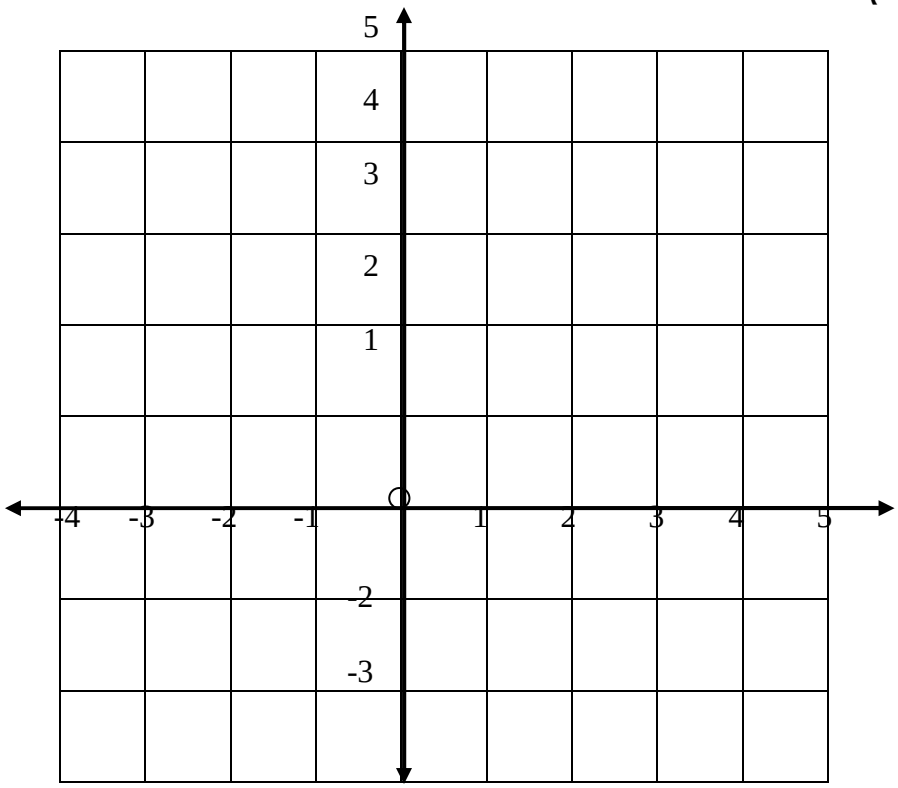
31. Kiyemba filled container **P** below with juice. He served juice to pupils of pre-primary using container **Q** as shown in the diagram.





Find the total number of full containers (Q) of juice he served. *(4 marks)*

32 a) On the graph below, plot the points P(-2, 3), Q(4, 3), R(4, -1),S (-2, -1) *(1 mark each)*



(b) Join P to Q, Q to R, R to S and S to P *(1 mark)*

(c) Draw the diagonals PR and QS. Find coordinates of the intersection of the diagonals. *(1 mark)*