

LOHANA SCHOOLS

P. 7 EXAMINATION - 2023 Mathematics.

Time allowed: 2 hours and 30 minutes

NAME: _____

Signature: _____

FOR EXAMINER'S USE ONLY

Stream _____

Date _____

A	
B	
TOTAL	

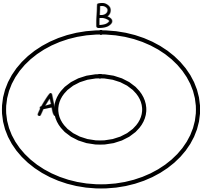
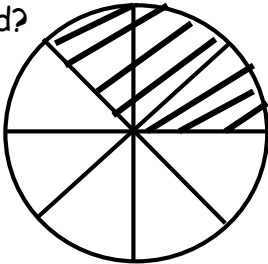
Read the following instructions carefully:

1. This paper is made up of section A and B.
2. Section A has 20 short answer questions (40 marks).
3. Section B has 12 questions (60 marks).
4. All answers to both section A and B must be written in the spaces provided.
5. All answers must be written in blue ink and diagrams should be drawn in pencil.
6. Any handwriting that cannot easily be read will lead to loss of marks.
7. Unnecessary alteration of work may lead to loss of marks.
8. No calculators are allowed in the examination room.

TEACHER'S COMMENT	
SIGNATURE	
Date:	

SECTION A: 40 MARKS

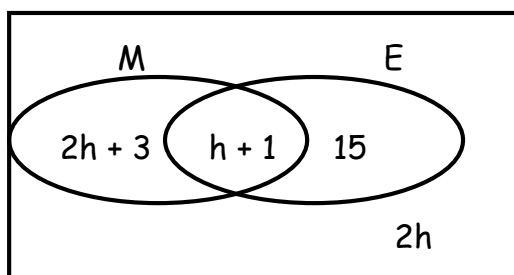
Questions 1 to 20 carry two marks each

1.	Multiply: $2 \times 2 \times 2$	2.	Write, "Twenty thousand, twenty five" in figures.
3.	Change 25kg to grammes.	4.	Round off 842.97 to the nearest tenths.
5.	Simplify: $^{-}8 - ^{+}2$	6.	Subtract: $^3/4 - ^2/5$
7.	In the diagram below, shade $A \cap B$. 	8.	What is the next number in the sequence? 1, 3, 6, 11, 18, _____
9.	Simplify: $6x + 3x - 4x$	10.	What fraction of the circle is unshaded? 
11.	Given that set $P = \{2, 3, 4, 9\}$ and $Q = \{1, 2, 3, 7, 9\}$. Find $n(P \cap Q)$	12.	The cost of three plates is sh.2,400. Find the cost of half a dozen of similar plates.

13.	Using a ruler and pair of compass only, construct an angle of 60° .	14.	Increase 600 in the ratio 4:3
15.	Express 45 in Roman numerals.	16.	If $2p^\circ$ and $3p^\circ$ are complementary angles, find the value of p.
17.	Work out: $\begin{array}{r} 111 \\ + 111 \\ \hline \end{array}$	18.	Calculate the area of a square of side 6cm.
19.	Solve for y: $2y + 4 = 16$	20.	Sempa banked sh.50,000 in centenary Bank at a simple interest rate of 12% per annum. What interest did he earn after 3 years?

SECTION B: (60 MARKS)

21. The Venn diagram below shows the number of the pupils who like Maths (M) and English (E)



- a) If 52 pupils like Maths, find the value of h . (3mks)
- b) How many pupils are in the class? (2mks)

22. Mukasa went to the market and bought the following items:
 2kg of sugar at sh.5000 each
 3kg of salt at sh.1000 per kg
 500gm of tea leaves at sh.3000perkg
 1 bar of soap at sh.2300
 a) How much did Mukasa spend altogether? (4mks)

- b) Mukasa had a balance of sh.2000 after paying the bill, how much money did he have at the beginning? (1mk)

23. The table below shows marks scored by P.7 in a Mathematics test. Study it and answer the questions about it.

Marks scored	40	60	20	10
Number of children	2	3	4	1

- a) How many children did the test? (1mk)
- b) What was the modal mark? (1mk)

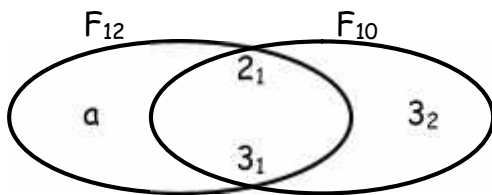
c) Calculate the mean mark.

(3mks)

24. a) Using a pair of compasses, a pencil and a ruler only, construct triangle PQR where $PQ = 8\text{cm}$, angle $PQR = 45^\circ$ and angle $QPR = 60^\circ$ drop a perpendicular from R to meet PQ at point K. (4mks)

b) Measure RK

25. Study the Venn diagram below and answer the questions that follow.



a) Find the value of a.

(2mks)

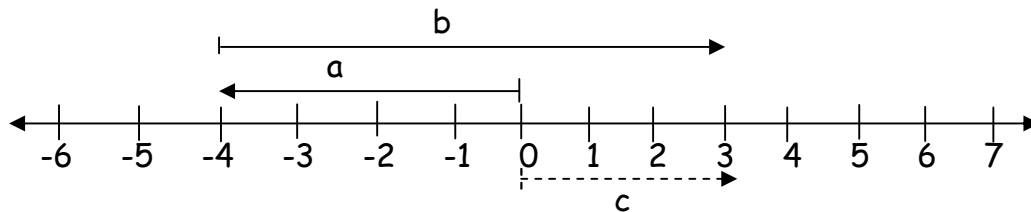
b) Work out the GCF of 12 and 18.

(2mks)

c) What is the LCM of 12 and 18?

(2mks)

26. Study the number line below and answer the questions about it.



a) Name the integers: (1mk each)

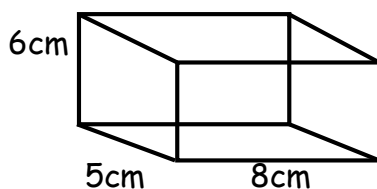
i) $a =$ _____

ii) $b =$ _____

iii) $c =$ _____

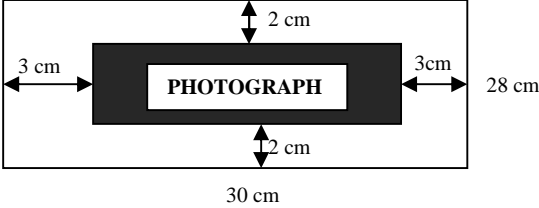
b) Write the mathematical sentence for the above. (1mk)

27. The figure below shows a rectangular box.



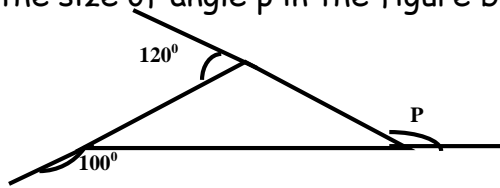
a) Work out its volume. (3mks)

b) Calculate its total surface area (2mks)

	<p>28. The figure below shows a photograph placed on a frame.</p>  <p>a) Find the length and width of the photo. (2mks)</p> <p>b) Find the area of the frame not covered by the photograph. (3mks)</p>
	<p>29. Three pupils are aged $(2x-5)$ years, $(3x+10)$ years and $(x-7)$. Their total age is 40 years.</p> <p>a) Find the value of x. (3mks)</p> <p>b) A father is 18 years older than his son. In 10 years' time, the father's age will be twice the age of the son. What is the son's present age? (2mks)</p>
	<p>30. Use the number 89.634 to answer the following questions:-</p> <p>a) Write the value of 3. (3mks)</p> <p>b) Expand the above numeral using exponents. (2mks)</p>

31. a) Find the size of angle p in the figure below.

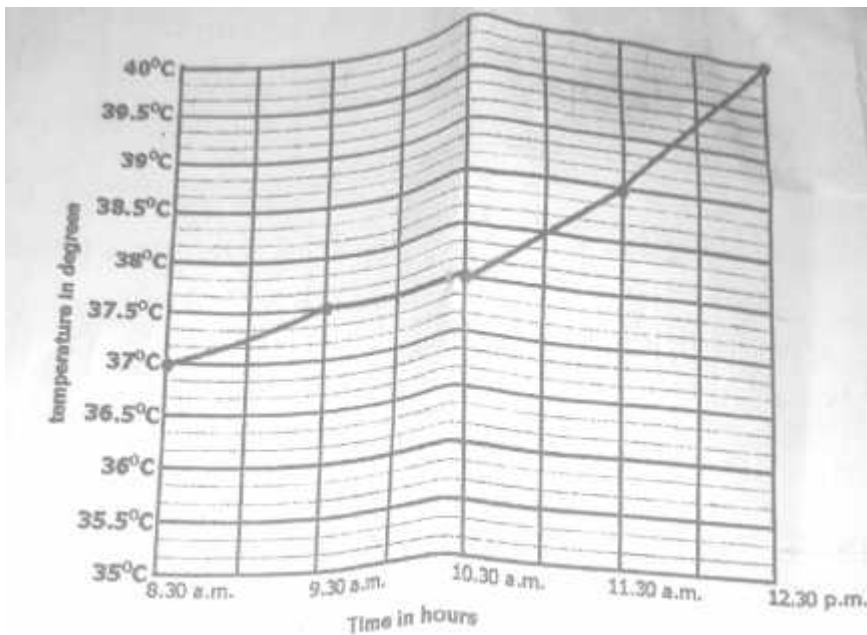
(3mks)



- b) What angle is a half of its complement?

(2mks)

32. The graph below shows weather temperature readings on a certain day at different intervals.



- a) How many times was the temperature found the same? (1mk)
- b) Every after what period of time was the temperature recorded? (1mk)
- c) What temperature was recorded at 11.30am? (1mk)
- d) What was the range of the temperature recorded? (2mks)

End