



THE EYE EXAMINATIONS BOARD

SPECIAL PRE-PLE SET ONE 2023

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Index
No.

EMIS No.						Personal No.		

Pupil's Name:

Pupil's Signature:

School EMIS No.

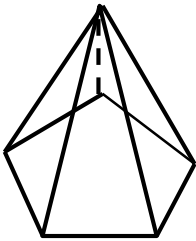
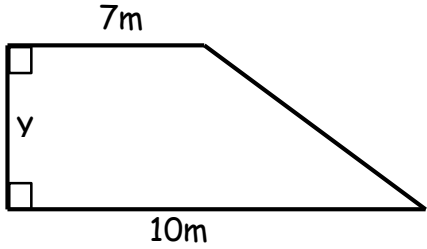
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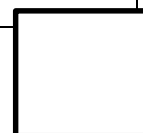
Read the following instructions carefully

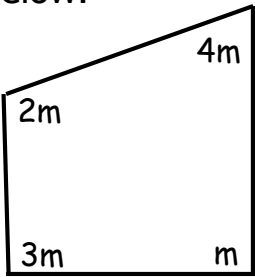
1. This paper has **two** Sections: **A** and **B**.
2. Section **A** has 20 answer questions (40 marks)
3. Section **B** has 12 questions (60 marks)
4. Answer **ALL** questions. Answers to both sections must be written in the spaces provided.
5. All answers must be written using a blue ballpoint pen or ink. Diagrams should be drawn in pencil.
6. Unnecessary alteration of work may lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks.
8. Do not fill anything in the box indicated for examiner's use only.

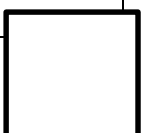
FOR EXAMINERS USE ONLY		
QN. NO.	MARK	
1 - 10		
11 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

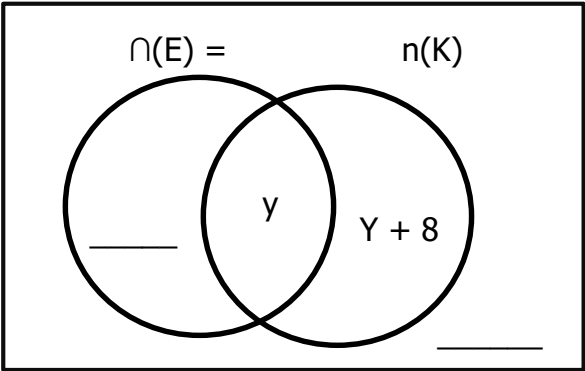
SECTION A

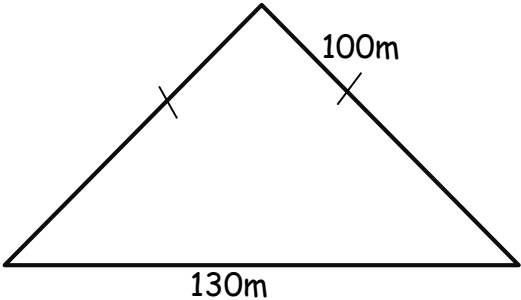
1.	Subtract 23 from 150	6	Simplify: $-15 - 25$
2	Write CMXLIX in Hindu Arabic numerals.	7	Name the solid figure below. 
3	Find the next number in the sequence. 2,5,6,9,10 _____	8	A motorist covered a distance of 280km from 10:30a.m to 12:00noon. Calculate the speed at which the motorist was driving.
4	Sarah was given $\frac{2}{3}$ of a sugarcane. She ate $\frac{1}{2}$ of it. What fraction did she remain with?	9	The area of the figure below is 34m^2 . Find the value of y. 
5	David scored 48 marks in End of term exams. Express his mark in tally form.	10	A retailer sold a television set at sh. 375,000 making a profit of 25%. What was the cost price of the T.V set?

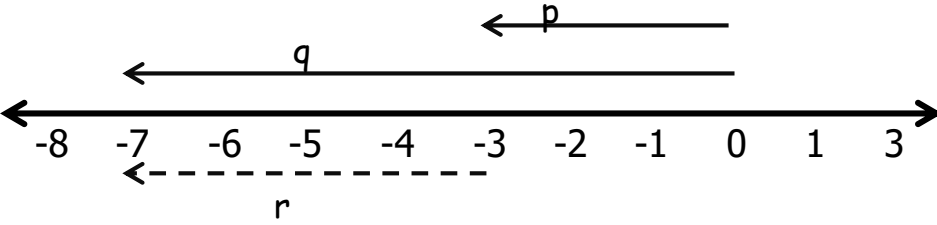


11	Set T is a set of men who breast feed. Write the set symbol for set T.	16	Find the mean of the following: 7, 4, -6, 10 and 5.
12	Find the value of $\frac{xy}{z}$ if $x = \frac{1}{8}$ $y = \frac{2}{3}$ and $z = \frac{4}{5}$	17	Find the quotient of the place value of 3 and the value of 4 in the numeral 23642.
13	Multiply: $213_{\text{five}} \times 13$	18	Find the value of m in the figure below. 
14	Isma started writing his homework at 10:15a.m and completed it at 1:45p.m. how long did he take writing the homework?	19	Write 4.03×10^3 as a single number.
15	Think of a number, subtract 7 then double the result. The answer is 18. Find the number.	20	Set R has 1 proper subset. How many elements are in set R?



	Section
21	<p>In a class, all pupils like Mathematics, 35 pupils enjoy English (E) and Mathematics while 20 pupils enjoy both, Kiswahili K and Mathematics only, Y pupils like all the three subjects and 5 like Mathematics only.</p> <p>$n(M) =$</p> <div style="text-align: center;">  </div> <p style="text-align: right;">(2mks)</p>
b)	<p>Find the value of y.</p> <p style="text-align: right;">(2mks)</p>
b.	<p>What is the probability of selecting a pupil from that class that enjoys only two subjects?</p>
22 a.	<p>A printer prints a book of 400 pages in just 5 minutes. If it prints 20 pages more each minute, how many pages does it print in the fifth minute?</p> <p style="text-align: right;">(4mks)</p>

23 a.	<p>Using a ruler, a pencil and a pair of compasses only, construct a parallelogram PQRS where $QR = 7\text{cm}$, $\angle Q = 45^\circ$ and line $PQ = 3.5\text{cm}$</p> <p style="text-align: right;">(4mks)</p>
b.	<p>Measure $\angle PRS$</p> <p style="text-align: right;">(1mk)</p>
24	<p>Musa wanted to fence a triangular piece of land shown below. He planted poles at intervals of 2.5m apart.</p> <div style="display: flex; align-items: center; justify-content: center;">  <div style="margin-left: 20px;"> <p>a. How many poles did he use? (3mks)</p> </div> </div>
b.	<p>If each pole costs sh. 2500. How much money did he spend on the poles?</p> <div style="text-align: right; margin-top: 20px;"> <div style="border: 1px solid black; width: 50px; height: 50px; display: inline-block; margin-bottom: 5px;"></div> <p>(2mks)</p> </div>

25	<p>Dennis buys 20 pawpaws at sh. 1500 each. He intends to recover the total cost price when he sells 12 of them.</p> <p>a. At what price must he sell each pawpaw?</p> <p style="text-align: right;">(2mks)</p>
b.	<p>Find his profit after selling all the pawpaws.</p> <p style="text-align: right;">(2mks)</p>
26	<p>The length of the rectangle is thrice its width. If the width is K and the area of the rectangle is 243cm^2.</p> <p>a. Find the value of K.</p> <p style="text-align: right;">(2mks)</p>
b.	<p>Calculate the perimeter of the rectangle.</p> <div style="text-align: right; margin-top: 20px;"> <div style="border: 1px solid black; width: 40px; height: 40px; display: inline-block;"></div> <p style="margin-top: 0;">(2mks)</p> </div>
27	<p>Study the numberline below carefully and answer the questions that follow.</p> <div style="text-align: center; margin-top: 20px;">  </div>

a.	<p>Write the integers represented by the arrows.</p> <p>1. $p =$ _____ ii) $q =$ _____</p> <p>$r =$ _____</p> <p style="text-align: right;">(1mk@)</p>
b.	<p>Write a Mathematical sentence for the above numberline.</p> <p style="text-align: right;">(1mk)</p>
28	<p>Moses and Joseph shared some money in the ratio of 2:3. Moses donated $\frac{1}{5}$ of his share and Joseph donated $\frac{3}{10}$ of his share. If they both donated sh. 260,000/=</p> <p>a. How much money did they share?</p> <p style="text-align: right;">(3mk)</p> <div style="border: 1px solid black; width: 50px; height: 50px; margin-left: auto; margin-right: 0;"></div>
b.	<p>How much money did each of them remain with?</p> <p style="text-align: right;">(3mks)</p> <div style="border: 1px solid black; width: 50px; height: 50px; margin-left: auto; margin-right: 0;"></div>

29	Given the digits 5, 9, 0 and 3.
a.	Write the largest and smallest 4 digits numerals that can be formed from digits above.
	(1mk@)
b)	Form any 4 digit even numbers from above digits.
	(2mk)
c.	Write the smallest numeral formed in (a) above in expanded form using exponents.
	(1mk)
30	Find the number whose scientific form is 9.6×10^{-3}
	(2mks)
b.	Find the value of P in $1P3_{\text{five}} = 102_{\text{six}}$
	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div> (3mks)

31 The table below shows the arrival and departure time for LINK bus from Kampala to Mbale.

Town	Arrival time	Departure
Kampala	_____	7:30a.m
Mukono	8:20a.m	8:30a.m
Jinja	9:30a.m	9:40a.m
Iganga	10:40a.m	11:00a.m
Mbale	12:30p.m	_____

a. At what time does the bus leave Jinja? (1mk)

Town	Arrival time	Departure
Kampala	_____	7:30a.m
Mukono	8:20a.m	8:30a.m
Jinja	9:30a.m	9:40a.m
Iganga	10:40a.m	11:00a.m
Mbale	12:30p.m	_____

a.	At what time does the bus leave Jinja? (1mk)
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b.	How long does the bus take to travel from Mukono to Iganga?
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c.	Express the arrival time at Mbale in 24 hour clock.
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32. Given that $y = 2x - 1$ is equations of a straight line. Use it to the table below.

a.

X	-3	_____	_____	0	_____
Y	_____	-5	-3	_____	+1

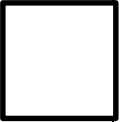
(1mk each)

X	-3	_____	_____	0	_____
Y	_____	-5	-3	_____	+1

(1mk each)

b. Write down the co-ordinates through which line $y = 2x - 1$ passes.

(1mk)



End