

# THE MAHG KAMPALA EXAMINATIONS BOARD

## END OF YEAR EXAMINATIONS 2024

### PRIMARY SIX

### MATHEMATICS

Duration: 2hrs 15mins

NAME: \_\_\_\_\_

SCHOOL: \_\_\_\_\_

DISTRICT: \_\_\_\_\_

**Read these instructions carefully**

1. This paper has two sections: A and B.
2. Section A has 20 questions (40 marks)
3. Section B has 12 questions (60marks)
4. Answer all questions. All answers to both sections A and B must be written in spaces provided.
5. All answers must be clearly written using blue or black ball point pen or ink.
6. Unnecessary changes 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 boxes indicated for official use only

**FOR EXAMINERS' USE ONLY**

PAGES	MARKS	EXR'S NO.
Page 1		
Page 2		
Page 3		
Page 4		
Page 5		
Page 6		
Page 7		
Page 8		
TOTAL		

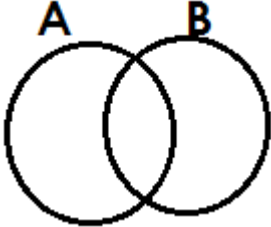
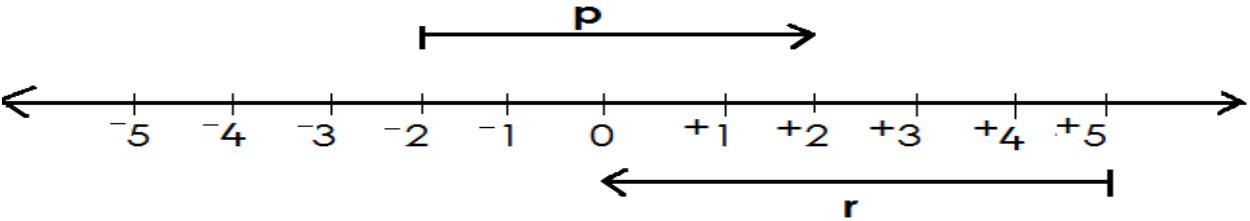
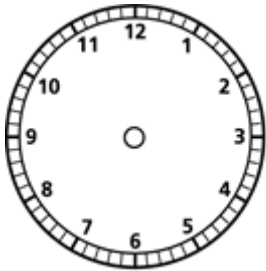
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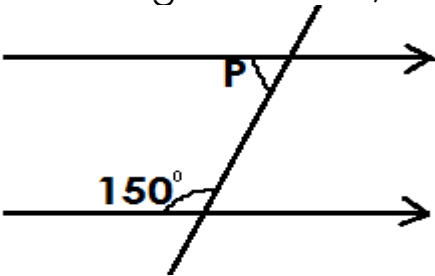
***FOR ACADEMIC EXCELLENCE ALWAYS USE THE MAHG SCHEME FRAMEWORKS, HOLIDAY PACKAGES, LESSON NOTES, AND TEXT BOOKS.***

***FOR MORE CONSULTANCE, CALL: 0775543444 / 0741976261 / +256742697640***

***The MAHG Kampala Examinations Board***

## SECTION A (40 MARKS)












1.	Add: $27 + 13$	2.	Simplify: $3a + a - 2a$
3.	Workout: $\frac{3}{4} \times \frac{1}{2}$	4.	Shade the region $A - B$ . 
5.	Without dividing, show which of these numbers <b>104</b> and <b>5070</b> is divisible by 3.	6.	A dice has faces numbered 1, 2, 3, 4, 5 and 6. If it is tossed once, what is the probability that a number less than 4 will appear on top?
7.	<p>Write the integers represented by letters <b>p</b> and <b>r</b> on the number-line below.</p>  <p>(i) <b>r</b> = _____</p> <p>(ii) <b>p</b> = _____</p>		
8.	Change $13_{\text{ten}}$ to base five.	9.	<p>Show the time, <b>fifteen minutes to nine</b> o'clock on the clock face below.</p> 

10.	Express half a kilogram to grams.	11.	Daniella picks 15 apples every day. How many apples will she have picked in four days?
12.	Using a ruler, a pencil and a pair of compasses only, construct an angle of $60^\circ$ .		
13.	Find the next number in the pattern below.  1, 2, 4, 5, 7, _____	14.	Divide 505 by 5.
15.	The ratio of girls to boys in a class of 56 pupils is 3:4 respectively. Find the number of girls in the class.		
16.	<p>In the diagram below, AB is parallel to CD. Find angle P.</p> 		


17.	Apio slept at 9:30pm for 2 hours. What time did she wake up?	18.	Solve for y: $3y = 15$ .
19.	The cost of 6 books is shs. 5400. How many such books will Mbatia buy with shs. 9000?	20.	Find the mean of; $3x$ , 6, $x$ and 2.


### SECTION B (60 MARKS)

21 The graph below shows the number of pupils in the three streams in a P.6 class at Mulanda Primary school.

Stream	Number present
P.6 Yellow	   
P.6 Blue	   
P.6 Red	  

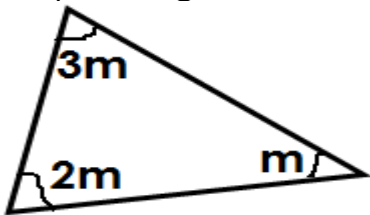
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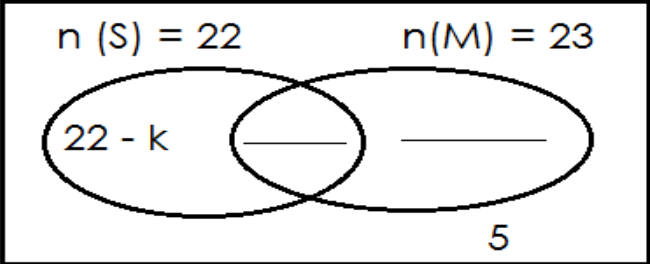
 = 15 pupils

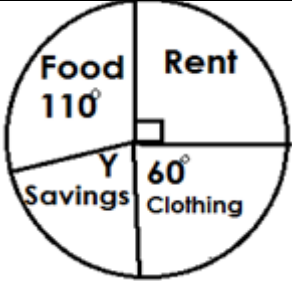
 = 8 pupils

a) How many pupils are in P.6 red? (1mk)

b) How many more pupils are in P.6 yellow than in blue? <span style="float: right;">(2mks)</span>	c. Find the total number of pupils in P.6 class. <span style="float: right;">(2mks)</span>
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22	Write <b>MIX</b> in Hindu – Arabic numerals. <b>(2mks)</b>	b)	Subtract the value of <b>7</b> from the value of <b>3</b> in the number; <b><u>3</u> 7 2 1</b> . <b>(3mks)</b>
23	Simplify: <b>(3mks)</b> $\frac{0.12 \times 5.4}{0.03 \times 0.6}$	b)	Express 0.025 as a common fraction in its simplest form. <b>(2mks)</b>
24.	<p>The exchange rates in a bank are as follow;</p> <ul style="list-style-type: none"> <li>• 1 US dollar (\$) = Ug. Shs. 3600</li> <li>• 1 Kenya shilling (K.shs) = Ug. Shs. 35</li> </ul> <p>a) Convert Kenya shillings 900 to Uganda shillings. <b>(2mks)</b></p> <p>b) Of a TV set costs Uganda shillings 720,000, find the equivalent cost of the TV set in dollars. <b>(2mks)</b></p>		
25 )	<p>Study the figure below and use it to answer the questions that follow.</p>  <p>a) Find the value of <b>M</b>. <b>(3mks)</b></p> <p>b) Using the value of <b>M</b> you have found, find the size of angle marked <b>3m</b>. <b>(2mks)</b></p>		

26.	a) Solve for b: $3b - 4 = 11$ <b>(2mks)</b>	b) Okello is 6 years younger than his sister Opio. If their total age is 30 years, how old is each child? <b>(3mks)</b>
27.	<p>In a class of 40 pupils, 23 like mathematics (M), 22 like Science (S), 5 like neither of the two subjects.</p> <p>a) Complete the venn diagram below. <b>(2mks)</b></p> <p><math>n(\xi) = \underline{\hspace{2cm}}</math></p> <div style="border: 1px solid black; padding: 10px; width: fit-content; margin: 10px auto;"> <div style="display: flex; justify-content: space-between; width: 100%;"> <span><math>n(S) = 22</math></span> <span><math>n(M) = 23</math></span> </div>  </div>	
b)	Find the value of <b>K</b> . <b>(mks)</b>	
28.	A rectangular garden whose length is 15m has an area of 60m <sup>2</sup> . -	
a.	Find its width. <b>(2mks)</b>	b. Calculate the total distance around the garden. <b>(2mk)</b>
29.	The pie chart below shows how Matata spends his monthly salary. Study it carefully and answer the questions that follow.	

	<div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p>(a) Find the value of <b>y</b>. <span style="float: right;"><b>(2mks)</b></span></p> </div> </div>		
b)	If he spends shs. 36000 on clothing, how much does he earn per month? <b>(2mks)</b>	c)	How much does he spend on food? <b>(1mk)</b>
30.	<p>A taxi driver left town <b>X</b> for town <b>Y</b> at 10:00am driving at a speed of 80km/hr. The driver reached town <b>Y</b> at 12:00 noon.</p> <div style="display: flex;"> <div style="flex: 1;"> <p>a) Calculate the time taken by the driver to reach town Y. <b>(2mks)</b></p> </div> <div style="flex: 1;"> <p>b) Find the distance between town <b>X</b> and <b>Y</b>. <b>(2mks)</b></p> </div> </div>		
31.	<p>With the help of a ruler, a sharp pencil and a pair of compasses only, construct a triangle <b>ABC</b> in which angle <b>ABC</b> = <b>90°</b>, line <b>BC</b> = <b>8cm</b> and line <b>BA</b> = <b>6cm</b>. <b>(4mks)</b></p>		
b)	<p>Measure line <math>\overline{AC}</math>.  <math>\overline{AC}</math> = _____</p>		
32.	<p>Alice saved shs. 360,000 with a bank that offers a simple interest rate</p>		

	of 10% per year.
a)	Calculate the total interest after 3 years. <b>(3mks)</b>
b)	Calculate the total amount of money Alice will have in the bank after 3 years. <b>2mks</b>

**E N D**