



**GLORISO EXAMINATIONS BOARD (GEB) - KAMPALA**  
**P.7 BEGINNING OF TERM 1 EXAMINATION - 2024**

**MATHEMATICS**

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

Random No.						Personal No.		

**Candidate's Name:** .....

**Candidate's Signature:** .....

**District ID No.**

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**Read the following instructions carefully:**

1. Do not write your **school** or **district name** anywhere on this paper.
2. This paper has two sections: **A** and **B**. Section **A** has **20 questions** and **section B** has **12 questions**. This paper has **8 pages** printed altogether.
3. Answer **all** questions. All the working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** working **must** be done using a **blue** or **black** ball point pen or ink. Any work done in pencil other than 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 be easily read may lead to **loss of marks**.
7. Do not fill anything in the table indicated **"For Examiners' use only"** and the boxes inside the question paper.

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

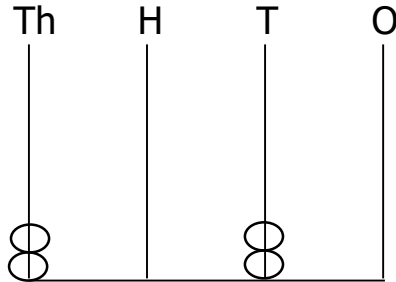
## SECTION A (40 MARKS)

Answer **all** questions in this section.

Question **1** to **20** carry two marks each

1- Workout:  $43 + 62$

2- Write the base ten number shown on the abacus below.



3- Given that  $S = \{a, b, c, d\}$  and  $T = \{a, f, g, b\}$ , find  $n(S \cap T)$

4- Find the next number in the sequence;

1, 8, 27, 64, \_\_\_\_\_

5- Find the range of the following integers;

-4, 3, 0 and 1



6- Workout:  $2^3 \times 3^2 \times 5^0$

7- Kintu celebrated his birthday 28days ago from today. If today is Thursday, what day of the week did Kintu celebrate his birthday?

8- Convert 450 millilitres into litres.

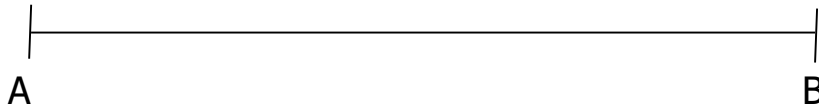
9- Simplify:  $5k - 3p + k + 5p$

10- An examination which ended at a quarter past one in the afternoon took  $2\frac{1}{4}$  hours. At what time did the examination start?



11- Workout: 
$$\begin{array}{r} 324_{\text{five}} \\ - 141_{\text{five}} \\ \hline \end{array}$$

12- Using a pair of compasses, ruler and a pencil only, construct a line through point Q parallel to line AB



• Q

13- Round off 4287 to the nearest hundreds.

14- Solve for y:  $\frac{3}{5}y - 2 = 4$

15- A shopkeeper sold an article at sh. 35,000 and made a loss of sh. 5,000. Calculate the percentage loss the shopkeeper made.



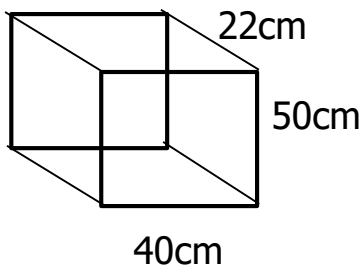
16- At a birthday party, the ratio of guests to the chairs was 2:3 respectively. After all the guests sitting, on one chair each, 6 chairs remained. How many guests were at the party?

17- Express  $27_{\text{ten}}$  as a quinary base.

18- Work out:  $\frac{3}{4} - \frac{1}{12}$

19- Given that  $3m$  and  $36^\circ$  are angles on a straight line, find the value of  $m$ .

20- Find the base area of the figure below.



### SECTION B: (60 MARKS)

Answer **all** questions in this section

Marks for each question are indicated in the brackets

21- (a) Find the value of 3 in  $312_{\text{five}}$

**(02 marks)**

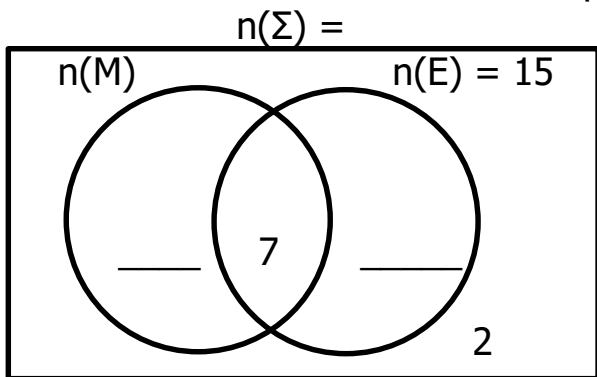
(b) Given that  $31_k = 22_{\text{ten}}$ . Find the value of  $k$

**(03 marks)**

- 22- The sum of 3 consecutive even numbers is 24. If the largest number is  $w$ , find the smallest number. **(04 marks)**



- 23- In a class,  $h$  pupils like mathematics (M) only, 15 pupils like English (E), 7 pupils like both mathematics and English, while 2 did not like any of the two subjects. (a) Use the above information to complete the venn diagram below. **(02 marks)**



- (b) Given that 20 pupils like mathematics, find the value of  $h$ . **(02 marks)**

- (c) How many pupils are in the class? **(02 marks)**

- 24- Given that  $a = 2$ ,  $b = -3$  and  $c = 2a$ .

- (a) Evaluate:  $ac - b$  **(02 marks)**

- (b) Find the value of  $2c + b^2$  **(03 marks)**



25- (a) Express 10m / second as km/hr.

**(02 marks)**

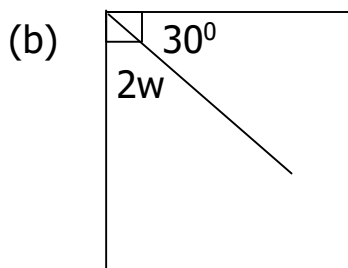
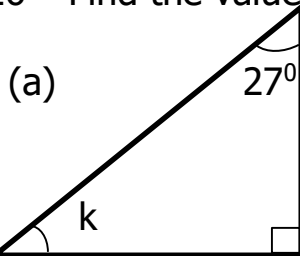
(b) An aeroplane moved a distance of 240km in 72 minutes. Calculate the speed the aeroplane used in kilometer per hour.

**(03 marks)**

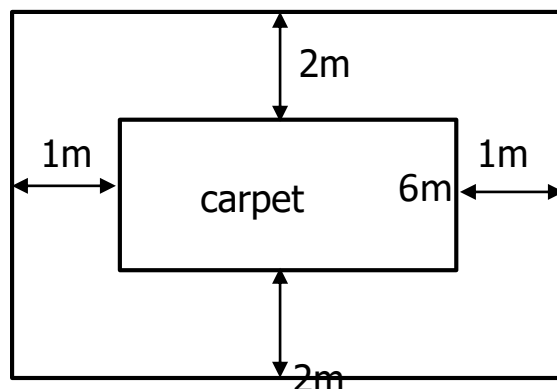
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26- Find the value of  $k$  and  $w$  in the figure below in degrees.

**(02 marks@)**



27- The figure below shows a rectangular carpet which was placed in a square room leaving some space as shown below.



(a) Find the length of the carpet.

**(02 marks)**

- (b) Calculate the area of the room which was not covered by the carpet.  
**(03 marks)**

28- Mr. Okello went with a fifty-thousand-shilling note and bought the following items;

- 1 ½ kg of meat at sh. 16,000/kg.
- 500ml of cooking oil at sh. 9,000 per litre
- 3kg of rice at sh. 4,000 per kg.

- (a) Calculate Mr. Okello's total expenditure. **(04 marks)**

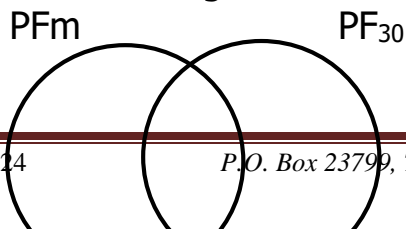


- (b) If he was given a discount of sh. 500, how much balance was he given?  
**(02 marks)**

- 29- (a) Workout:  $\frac{2.4 \times 0.5}{0.6}$  **(03 marks)**

- (b) Simplify:  $0.5 - 1.3 + 2.5$  **(02 marks)**

30- Study the factor diagram below and use it to answer the questions that follow.



$$\begin{array}{ccc} & 2_1 & \\ 2_2 & & k \\ & 3_1 & \end{array}$$

(a) Find the value of;

(i)  $k$

(ii)  $m$

**(02 marks@)**

(b) Calculate the GCF of  $PF_m$  and  $PF_{30}$

**(01 mark)**

8



31- Using a pair of compasses, ruler and a pencil only,

(a) Construct a triangle PQR such that  $PQ = 7\text{cm}$ , vertex P is at a right angle and  $PR = 5\text{cm}$ .

**(04 marks)**

(b) Measure angle PRQ

**(01 mark)**

32- The table below shows the marks scored by some pupils in a certain test. Use it to answer the questions that follow.

Marks	90	70	80	60
No. of pupils	1	3	2	4

(a) How many pupils did the test?

**(02 marks)**

(b) Calculate the average score for all the pupils.

**(03 marks)**



**\*\*END\*\***

