



# THE REAL PRIVATE TEACHERS' VOICE EXAMINATIONS BOARD

## THE REAL VERIFIED UNEB BLUE PRINT ITEMS FOR PRIMARY LEAVING EXAMINATIONS

2023

### MATHEMATICS (SET EIGHT)

*Time allowed: 2 Hours 30 Minutes*

Index no:

Random No					Personal No		

Candidate's name: .....

Candidate's signature: .....

School: .....

District: .....

### Read the following instructions carefully

1. This paper is made up of two sections: **A** and **B**.
2. Section **A** has **20** questions (**40 marks**).
3. Section **B** has **12** questions (**60 marks**).
4. Answer ALL questions in both sections **A** and **B**.
5. All answers **MUST** be written in the space provided  
In blue or black ball point pens or ink. All diagrams  
Should be in pencil.
6. Unnecessary crossing of answers will lead to loss of  
Marks.
7. Poor hand writing which cannot be easily read,  
May lead to loss of marks.

#### FOR EXAMINERS' USE ONLY

Qn.No	MARKS	SIGN
1-10		
11-20		
21-22		
23-24		
25-26		
27-28		
29 - 30		
31 - 32		
TOTAL		

The Real Private Teachers' Voice Examinations Board 2023.

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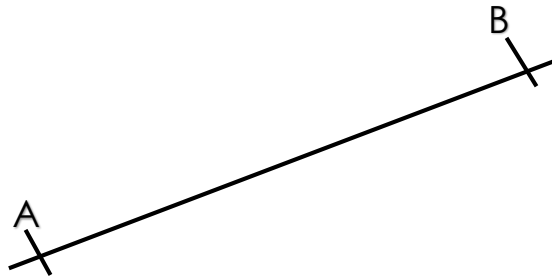
### **SECTION A (40 MARKS)**

1. Add: 103 to 17.
  
  
  
  
  
  
  
  
  
  
2. Express 3.08 kilograms of meat to grams.
  
  
  
  
  
  
  
  
  
  
3. Change  $42_{\text{ten}}$  to base five.
  
  
  
  
  
  
  
  
  
  
4. Simplify:  $(2.5 \times 900) + (100 \times 2.5)$
  
  
  
  
  
  
  
  
  
  
5. Subtract: 9 tenths from 2 tens.
  
  
  
  
  
  
  
  
  
  
6. Find the next number in the sequence: 9, 3,  $1, \frac{1}{3}, \underline{\hspace{2cm}}$
  
  
  
  
  
  
  
  
  
  
7. Solve:  $0.5 - 1 = 0$



8. Add:  $\boxed{\times} + \frac{2}{3}$

9. Using a pair of compasses and a ruler only, construct a perpendicular bisector of line AB below.



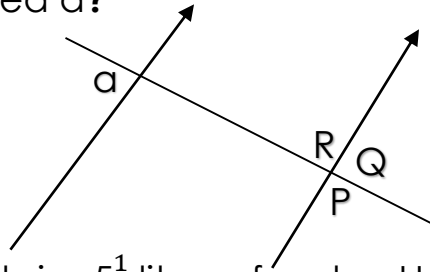
10. Draw a Venn diagram to show that all girls (G) are females (F).

11. The area of a rectangle is  $36\text{cm}^2$ . Its length is  $9\text{cm}$ . What is the width of the rectangle?



12. Simplify:  $2cb + 4am + cb - 2am$ .

13. In the diagram below, which of the angles P, Q, R is the same as the angle marked a?



14. A pot contains  $5\frac{1}{2}$  litres of water. How many half-litre bottles will the water fill?

15. A pencil and an exercise book cost Shs4,000. An exercise book costs three times as much as the pencil. What is the cost of a pencil?

16. If 1 Tanzania shilling = Ug.Shs1.5, how many Tanzania shillings can you get from Ug.Shs18,000?



17. Find the number of subsets in a set  $M$  with odd numbers between 7 and 17.

18. The arithmetic mean mass of three parcels is 5kg. Two of them have a mass of 4kg each. What is the mass of the third parcel?

19. Solve  $4 + m = 3$  (finite 5)

20. Express 108 in powers of 2 and 3.

**SECTION B (60MARKS)**

21. In a small town in Uganda, the population has been slowly declining. In the year 2022, there were 2087 residents. There were only 1560 residents this year. Work out the percentage decline in the population. (3mks)



22. Trees are planted round the semi-circular floor garden below at an interval of 60cm. The diameter of the semi-circle is 21 metres. How many trees can be planted round the whole garden? Use  $\pi$  as  $\frac{22}{7}$  (5mks)

23. The sum of three consecutive multiples of 8 is 888. Find the multiples. (6mks)



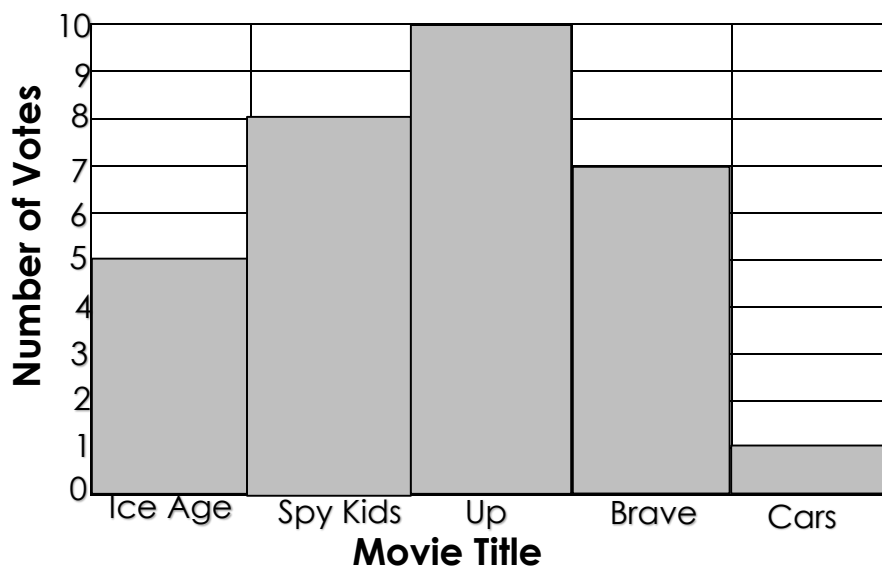
24.a). Express 0.8333..... as a common fraction.

(3mks)

b). Express 24% as a ratio in its simplest form.

(2mks)

25. At home the learners had to vote on which movie to watch. The voting results are listed below. Use the bar graph to answer the questions.



a). What is the difference in the number of learners who voted for "Spy Kids" and the number of learners who voted for "Ice Age"? (2mks)

b). Find the mean number of learners who participated in voting for the movie titles. (3mks)

26. A man bought the following items from a shop:

- 3kg of pesticides at 7.5 US Dollars(\$) per kg.
- 5kg of fertilizers at 550 Kenya Shillings (K.sh.) per kg
- 5litres of petrol at 65 Pounds (£)

Given that 1US = Ug.shs3600, £1 = Ug.Shs4,200 and 1K.Shs = Ug.Shs30, find his total expenditure on the items. (6mks)





27. Mummer rolled a die 30 times and recorded the following results.

Face	1	2	3	4	5	6
Number of times the face shows up	4	9	y	2	1	3

a). Find the value of y (2mks)

b). What was the probability of getting a six on the die to show up. (1mk)

c). How many times would a face marked 2 be likely to show up if he had rolled the die 60 times? (2mks)

28. Find the product of the value of 3 in 2375 and the value of 4 in 2.41<sub>five</sub>. (5mks)



29.a). In a scale diagram, 1 cm represents 50 meters. Write the linear scale in ratio form. (2mks)

b). Find the drawing length for 1.25km. (2mks)

c). Find the actual length in kilometers corresponding to a length of 10.5cm on the diagram. (2mks)

30. Musa, John and David start at the same time, position and direction to run round a circular field. Musa takes 180 seconds, John takes 480 seconds and David takes 720 seconds to complete one circle. If they start running at 3:00pm, at what will they all be at the same position? (4mks)



31.a). A tank has two taps that pour water into it. Tap A turned on alone, fills the tank in 20 minutes. Tap B turned on alone, fills the tank in 10 minutes. How long will the two taps turned on at the same time take to fill the tank? (2mks)

b). If both taps pour 36litres of water per minute, what amount of water does the tank hold when full? (3mks)



32.a). A taxi leaves Kampala at 9:15am and reaches Mbarara Taxi Park at 12:15pm at a speed of 60km/hr. The same taxi returns to Kampala, through the same route, at a steady speed of 90km/hr. Calculate the distance covered by a taxi from Kampala to Mbarara. (2mks)

b). Calculate the average speed of the taxi for the whole journey. (3mks)

