



# THE E-LEARN EXAMINATIONS BOARD

## P.7 BEGINNING OF TERM TWO

2024

### MATHEMATICS

*Time Allowed: 2 hours 30 minutes*

Index No.	EMIS No.						Personal No.		

Pupil's Name: .....

Pupil's Signature: .....

School Name: .....

District Name: .....

#### Read the following instructions carefully:

1. Do not forget to write your **school** or **district name** on the paper.
2. This paper has two sections: **A** and **B**. Section **A** has **20** questions and section **B** has **12** questions. The paper has **12** printed pages altogether.
3. Answer **all** questions. **All** working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** answers **must** be written using a **blue** or **black** ball point pen or ink. Any work written in pencil will **not** be marked.
5. Unnecessary **changes** in your work and handwriting that cannot be read easily may lead to **loss of marks**.
6. Do not fill anything in the table indicated: **"For Examiners' use only"** and 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 – 32		
TOTAL		

**SECTION A: 40 MARKS**

Answer ***all*** the questions in this section.

Questions **1** to **20** carry two marks each.

1. Workout:  $36 \div 6$
2. Write in words: 1,995.
3. Round off 34.567 to the nearest tenths.
4. Four black books cost sh.24000. Find the cost of 8 similar black books
5. Using ruler, a sharp pencil and a pair of compasses only, construct an angle of  $60^\circ$  at point A

**A**

6. Given that,  $17_n = 15_{\text{ten}}$ . Find the base represented by n.

7. Workout:  $(42 \div 6) - (30 \div 6)$  using distributive property
8. Given -4, 3, -1, 0 and 2. Arrange the integers in ascending order.
9. Express 7.8 in standard form
10. Express 0.363636.....as a vulgar fraction in it's simplest form.
11.  $\frac{5}{8}$  of water in the tank lasts a company for 45days. How long will  $\frac{2}{3}$  of the water in the same tank last the company?
12. Find the Lowest common factor (LCF) of 3 and 5

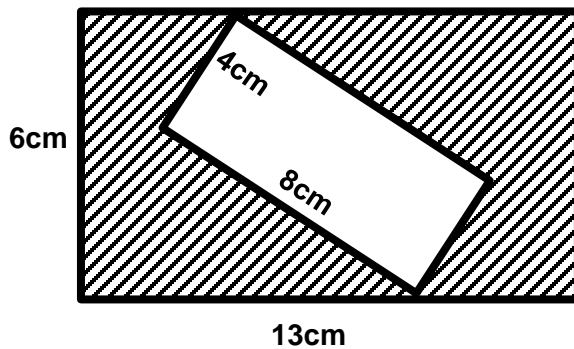
**Turn Over**

13. Simplify;  $-3 + +8$  using a number line

14. Set  $k$  has 32 subsets. Find  $n(k)$

15. Find the smallest number of mangoes that can be divided among 6 girls or 8 boys and leaves 2 as a remainder.

16. Find the area of the shaded part.



17. The base area of a cylinder is  $154\text{cm}^2$ . Calculate its volume if the height is 20cm.

18. Express 108 as the product of its prime factors.

19. Express 0.000765 in standard form

20. Solve :  $3a-6=a+4$

**SECTION B: 60 MARKS**

*Answer **all** questions in this section.*

*Marks for each question are indicated in brackets.*

21. a) change  $\frac{8}{33}$  into a recurring decimal

*(02 marks)*

b) Simplify:  $2\frac{4}{5} \times \frac{2}{7} \div 1\frac{1}{9}$

*(03 marks)*

22. Two bells at a certain school are rung at intervals of 40 minutes and 50 minutes respectively for both lower and upper primary to change the lessons. How many lessons will each section have had by the time the two bells ring together?

*(04 marks)*

23. A man deposited sh.40,000 for 5years at a simple interest rate of  $2\frac{1}{2}\%$  per year.

(a) Calculate his simple interest.

*(03 marks)*

(b) How much did he find on his account after 5years?

*(02 marks)*

24. In a class of 45 pupils, 30 pupils like English (**E**) and 25 like Math(**M**).  
**X** pupils like both subjects.

a) Draw a Venn diagram to show the above information.

*(02 marks)*

b) How many pupils like both subjects?

*(02 marks)*

c) How many pupils like only one subject?

*(01 mark)*

**Turn Over**

25. a) Using a pencil, ruler and pair of compasses only, construct a triangle **ABC** in which **BC = 6cm**, angle **ABC = 90°** and **BCA = 30°**

*(04 marks)*

- b) Find the area of the triangle ABC

*(01 mark)*

26. Mugisha went shopping and bought the following items.

3 packets of wheat flour at sh.7800 each

2000ml of cooking oil at sh.6500 per litre

1 ½ kg of sugar at sh.5000/kg

Packet of baking powder at sh.1500.

- a) Find mugisha's expenditure.

*(01 mark)*

- b) Workout his change if he went shopping with a fifty thousand Shilling note.



27. Kevina spent  $\frac{1}{4}$  of her monthly income on food,  $\frac{4}{5}$  of the remainder on fees and the rest on water. If she spent sh.70,000 more on fees than on food,  
a) Find the fraction she spent on water (03 marks)

b) Find kevina's monthly salary (02 marks)

28. a) Change 72km/hr to m/s (02 marks)

b).Aman drove at 80km/hr for 2  $\frac{1}{4}$  hrs. He rested for 45minutes. After resting, he covered 240km at 80km/hr. Calculate the average speed for the whole journey. (03 marks)

29. a) Solve then find the solution set of the inequality:  
 **$2x-3 < 3$**  (03 marks)
- b) Workout:  $3-5 = \dots \pmod{6}$  using dial method (02 marks)
30. a) Malik bought 5 books and 3 pens at sh.25000. If the cost of a book is sh.200 more than a pen, find the amount Malik spent on each item. (03 marks)
- b) Solve for **k** if **a=12** and  **$6k-18=a$**  (02 marks)
31. a) The area of a square garden is  $144\text{cm}^2$ . Find the length of each side. (use  $=\frac{22}{7}$ ) (02 marks)

b) Find the capacity of a triangular tank whose base area is  $120\text{cm}^2$  and height 8cm.  
(03 marks)

32. Ten children scored the following marks in mathematics test. **70, 85, 40, 60, 90, 60, 75, 60, 50, 60.**

a) Find the modal frequency. (01 mark)

b) Find the median

(02 marks)

c) Find the mean mark

(03 marks)