THE REAL PRIVATE TEACHERS' VOICE EXAMINATIONS BOARD
THE _REAL_ VERIFIED UNEB BLUE PRINT ITEMS
FOR PRIMARY LEAVING EXAMINATIONS
2023
MATHEMATICS (SET TEN)
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.
Calls: 0763-499772/0704-816448 **Payments:** 0763 499772 **Whatsapp** 0703-495592

Rely on us for weekly, monthly, Beginning of term, midterm and End of term tests. Pre-mocks, Mocks and Pre-PLE Examinations.
OUR PROMISE We are here to ease P.L.E for you. We are ready to **SERVE** you till the last minute.

We are Approachable, Reliable and Affordable

SECTION A (40 MARKS)

1. Add: 1.3 + 1.7

2. Write **XLVI** in Hindu Arabic numerals.

3. What number has been expanded? $(4 \times 10^2) + (2 \times 10^0)$

4. The area of a triangle is $24cm^2$. Find its height if the base is 8cm.

5. If 🌳 represents 12 trees, draw pictures to represent 48 trees.

6. Simplify: 5m – 4m + 2m

ENGAGE.   INSPIRE .   THRIVE.

7. Construct an angle of 60^0 using a sharp pencil, a ruler and a pair of compasses.

8. Change 0.25 to a fraction in its lowest terms.

9. Arrange these integers in ascending order. 4, 1, -2, 9, -7

10. Isiah bought 6 text books at sh. 36,000. What is the cost of a dozen of

11. similar books? If set P = {5,6,9}, list down all The proper subsets that can be formed from set P.
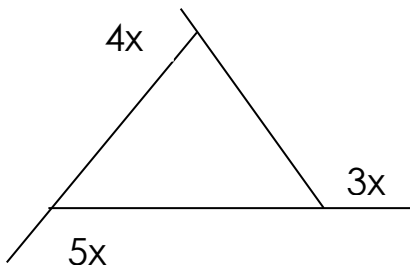
ENGAGE.   INSPIRE .   THRIVE.

12. A man was born in 20 BC and died in 30AD. How old was he when he died?

13. A wheel has an internal diameter of 70cm. How many complete revolutions will it make to cover a distance of 2.2km?

14. Express 144km/hr as m/sec.

15. A polygon has an exterior angle of 45^0. How many sides does it have?

16. Find the size of angle x

ENGAGE.   INSPIRE.   THRIVE.

17. Change 33_{five} to decimal base.

18. Find the smallest number which when divided by 12 or 15 leaves no remainder.

19. The teacher's salary was increased by 10% to sh.440,000. What was the original salary?
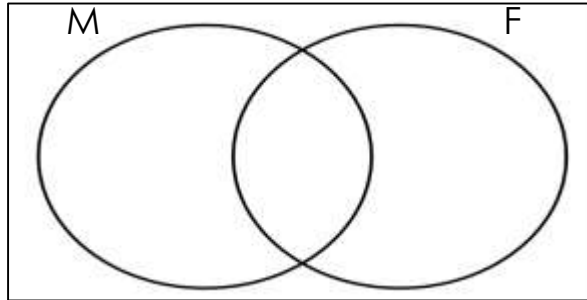
20. Two bells are used to change lessons. One rings after 20 minutes and another after 30 minutes. How many minutes will it take for the two bells to ring together?

ENGAGE.   INSPIRE.   THRIVE.

SECTION B (60 Marks)

21. In a club of 20 members, 15 of them eat meat (M), 12 eat fish (F). Some members eat both meat andfish.
a) Represent the above information on a venn diagram (2mks)

b) How many members eat both meat and fish? (1mk)

c) If a member is picked at random to become the chairman of that club, what is the probability that the member picked eats fish only? (2mks)
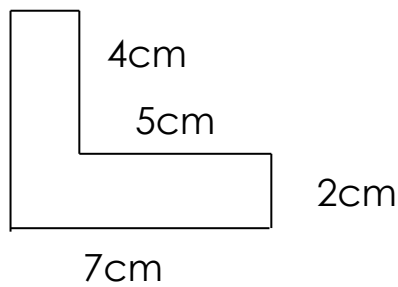
22.a)Express 0.00125 in standard form. (2mks)
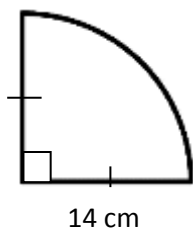
b). Simplify: -4 - ⁻7 using mind maps (1mk)

c) If 2m + 4 = 3 (mod 5) find the value of m. (2mks)

ENGAGE.   INSPIRE.   THRIVE.

23 a) Find the area of the figure below; (4mks)

4cm

5cm

2cm

7cm

b)Find the distance around the figure. $(\pi = \frac{22}{7})$ (2mks)

14 cm

24a).In a class of 48 pupils, $\frac{3}{4}$ are boys. The rest are girls. How many boys are there? (2mks)

b)How many more boys are there than girls in class. (1mks)

ENGAGE.   INSPIRE .   THRIVE.

c) How many $\frac{1}{4}$ litres can be obtained from a 5 litre can? (2mks)

25a). Abdul scored the following marks: 80, 72, 68, 70, and 90 Find Abdul's average mark.(2mks)

b)Find the sum of the median and range. (1 mk)

c)Find the average of 2x + 3, x and 66. (2mks)

26. a) The sum of three consecutive even numbers is 24. Find the numbers(2mks)

b)What number is written in scientific as 3.4×10^2? (2mks)

ENGAGE.   INSPIRE.   THRIVE.

c) Work out the reciprocal of $3\frac{1}{2}$? (1mk)

27. a) A book costs twice as much as a pen and a set costs sh.200 more than a pen. If the three items cost sh.3000. What is the cost of each item? (3mks)

b) After selling a book at sh.12000 a shopkeeper realized a profit of 20%. What was the buying price of the book? (2mks)

28a). The ratio of boys to girls in P.7 is 7:2. There are 40 more boys than girls in the class. How many boys are in the class? (3mks)

b) Find the number of girls in the class. (1mk)

c) How many pupils are there altogether? (1mk)

ENGAGE.   INSPIRE.   THRIVE.

29. a) My father was born in MCMLXXXV While Mama was born in MCMXC. Find the difference in their ages. Give the answer in Hindu Arabic numerals. (2mks)

b) A certain church was built in 1922. write this year in Roman numerals(1mk)

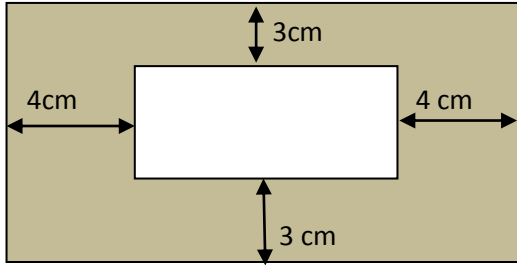c). Find the sum of 273, 59, 70 and 120. Give your answer in Roman numerals. (2mks)

30. a) Mr. Ekanya was born in 1960. Express this year in base five.(2mks)

b) Mukula is 1897cm tall. Find his height in base eight. (2mks)

ENGAGE.   INSPIRE .   THRIVE.

c). Gabriel weighs 85kg. Write his weight in base three. (2mks)

31. Study the figure below

a). Find the length and width of the large rectangle. (2mks)

b). Calculate the area of the small rectangle. (1mk)

c). Find the area of the large rectangle. (1mk)

b) Find its perimeter. (1 mk)

d). Find out the area of the shaded part.(1mk)

ENGAGE.   INSPIRE .   THRIVE.

32. Using a ruler and a pair of compasses only. Construct an accurate figure using thesketch below: (4mks)

6cm

ENGAGE.   INSPIRE .   THRIVE.