# THE REAL PRIVATE TEACHERS' VOICE EXAMINATIONS BOARD

# THE *REAL* VERIFIED UNEB BLUE PRINT ITEMS

# SUPPLEMENTARY EMMERGENCY

## FOR PRIMARY LEAVING EXAMINATIONS

2023

## MATHEMATICS (SET TWO)

*Time allowed: 2 Hours 30 Minutes*

Index no:

| Random No | Personal No |
|---|---|
| | |

Candidate's name: ……

Candidate's signature: ……

School: ……

District: ……

| 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** | | |

## 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.

## SECTION A (40 MARKS)

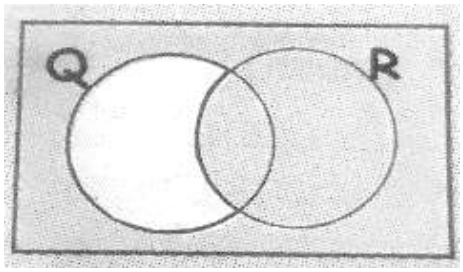
1. Divide: 54 by 3

2. If B = {c, o, w}, Find n(B)

3. Solve: X + 3 < 5

4. What is the least number that can be divided by either 12 or 18 and leaves no remainder.

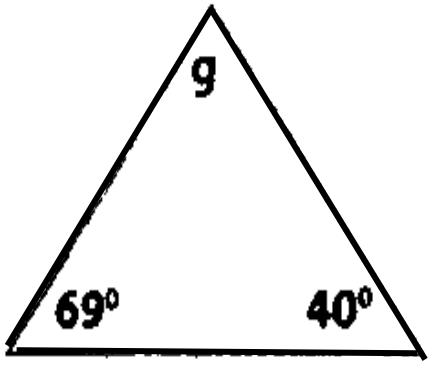
5. Describe the shaded part.




6. Simplify 3q + 2q + q

7. Find the sum of the largest and Smallest 3-digit numbers formed using 4,0 and 8

8. Find the value of angle marked **g**

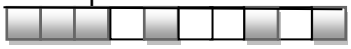



9. Convert $13_{four}$ to binary system

10. The sum of three consecutive odd numbers is 33. Find the numbers.

11.Work out 3 4
X 2
_____

12.Express the shaded part as a percentage.

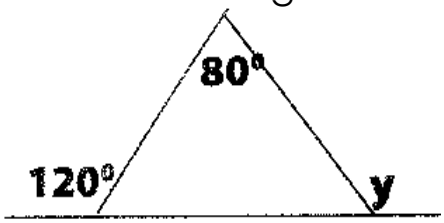


13. Solve and find the solution set. $3 - \frac{1x}{3} > 7$

14. Write MCM in Hindu Arabic Numerals.

15.Subtract $10110_{two} - 1111_{two}$

16. In the diagram below, find the size of angle marked **y**




17.Find the number whose standard form is $5.2 \times 10^2$

18. Wambuzi kept sh.160,000 in a bank for 2 years, which gives an interest rate of $7\frac{1}{2}$per year. How much money did he have in the bank at the end of the second year?

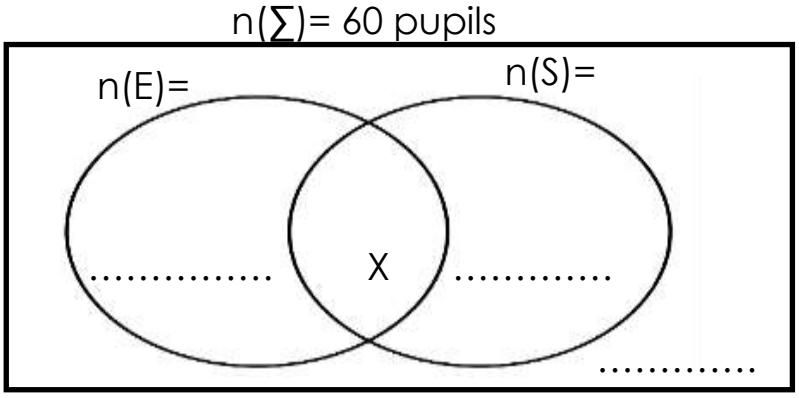
19. Work out: 112 – 712

20. In a class of 42 pupils, the ratio of boys to girls is 4:3. Find the number of girls.

## SECTION B

21. In a class of 50 pupils, all the pupils like English. 33 like maths and 32 like science. X like both and 1 pupil likes English only.

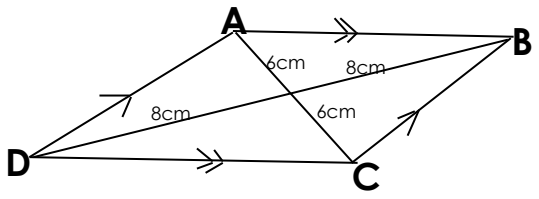
a). Complete the venn diagram below. (1mk)




b). Find the value of **x** (2mks)

c). How many pupils like two subjects? (2mks)

22. a). Calculate the area of the figure below. (2mks)




b).Find the length of one side and work out the perimeter. (3mks)

23.a)A motorcycle got a puncture after covering $\frac{2}{3}$ of its journey. If it was left with half of 120km to cover the journey. How long was the journey? (3mks)

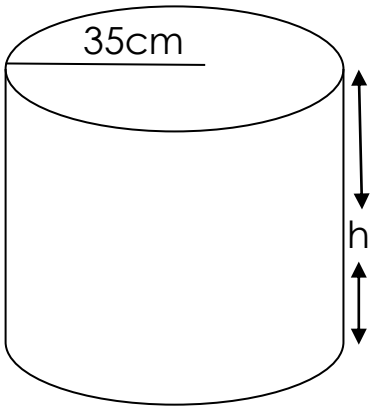
b). Raymond walked 0.5km. What distance did she cover in metres? (2mks)

24.a) The size of each interior angle of a regular polygon is $144^0$. Find the exterior angle.(2mks)

b).Name the polygon.(1mk)

c).Calculate the interior angle sum of the polygon.(2mks)

25.a). The capacity of the tank below is 385litres. Find the volume of the tank. (2mk)




b). Calculate the height of the tank. (3mks)

26.a). There are 800 cows on Musa's farm. 70% of them are exotic and the rest are local breeds. Find the percentage of local breeds. (2mks)

b). How many cows are exotic? (3mks)

27.a). If a cylinder carries 6.25ml of milk, how much milk will 4 similar cylinders carry? (2mks)

b). Work out the value of $\frac{0.28 \times 0.54}{0.09 \times 4.2}$ (3mks)

28.a) Express 755 in Roman Numerals. (2mks)

b). Ben was born in MCMXXII. Express Ben's age in Hindu Arabic Numerals. (2mks)

c).Make the card shown below. (1mk)

**CDXLIV**

29. Ssempa did $\frac{3}{8}$ of his holiday work in the first week of the holiday, $\frac{4}{8}$ of it in the second week and the remaining work was done in the last week of the holiday.

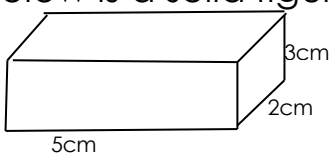
a). What fraction did he do in the first and the second week?(2mks)

b). Which fraction did he do in the last week?(2mks)

c). Find the next two equivalent fractions of $\frac{2}{5}$(1mk)




30.Below is a solid figure. Use it to answer the questions that follow.




a). Find the number of:

(i) Faces……..(1mk)

(ii)Vertices……(1mk)

(iii) Edges……(1mk)

b). Calculate the volume of the cuboid above. (2mks).

31. Given the magic square below. Use it to answer the questions.

| | | |
|---|---|---|
| A | 6 | 11 |
| 8 | W | 12 |
| 9 | 14 | 7 |

a). Find the magic sum (1mk)

b). Work out the value of **A** (2mks)

c). Calculate the value of **W** (2mks)

32. Using a pencil, a ruler and a pair of compasses only, construct a triangle **ABC** in which **AB = 8cm**, angle **CAB = $60^0$** and angle **ABC=$45^0$** Drop a perpendicular from **C** to meet **AB** at **C**.(4mks)

b). Measure line **CE**. (1mk)