

# SURE KEY EXAMINATIONS BOARD PRIMARY SIX QUALITY CHECK TWO EXAMINATION 2024

#### **MATHEMATICS**

#### Time Allowed: 2 hours 30 minutes

| Admission No. | Personal No |
|---------------|-------------|
|               |             |

| Pupil's Name:         |      |
|-----------------------|------|
| Pupil's Signatu       | ıre: |
| School Name:          |      |
| <b>District Name:</b> |      |

### Read the following instructions carefully:

- Do not forget to write your school and district name on this paper.
- 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
- Answer all questions. All the working for both sections A and B must be shown in the spaces provided.
  - 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.
- No calculators are allowed in the examination room.
- Unnecessary changes in your work and handwriting that cannot easily be read may lead to loss of marks.
- Do not fill anything in the table indicated:
   "For Examiners' Use only" and boxes

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

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**Turn Over** 

## **SECTION A: 40 MARKS**

Answer **all** questions in this Section Questions **1** to **20** carry two marks each

1. Workout: 2 x 2 x 2

2. Simplify:  $^{-}4 + ^{+}6$ 

3. Write four thousand, five hundred and two as a single numeral.

4. Find the sum of 12tens and 8ones.

5. The prime factors (PF) of  $\mathbf{y}$  are  $\{2_1, 2_2, 3_1, 5_1\}$ . Find the value of  $\mathbf{y}$ 

6. Below is the attendance recorded in primary six of Mbuga Primary School. Study it carefully and answer questions that follow.

| DAY   | MON | TUE | WED | THUR | FRI |
|-------|-----|-----|-----|------|-----|
| Boys  | 29  | 27  | 26  | 15   | 21  |
| Girls | 24  | 24  | 23  | 20   | 19  |

If all the pupils were present on Monday, find the number of pupils who were absent on Friday.

7. Given that a = 6 and  $b = \frac{a}{2}$ , find the value of  $a^2b$ .

8. Workout:  $1144 \div 11$  using long division.

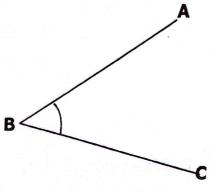
9. Given that 16 subsets can be formed in Set Q. Find n(Q).

10. Find the number that has been expanded to give;

$$(4 \times 10^3) + 60 + 400 + (9 \times 10^0)$$



11. Using a ruler, a pencil and a pair of compasses only, bisect angle ABC below.



12. Tonny is 9 years younger than Thomas. Their total age is 41 years. How old is Fonny?

13. A horizon bus was moving at a steady speed of 80km/h from Kiryandongo to Gulu. The distance between the two towns is 400km. How many minutes did the bus take travelling?

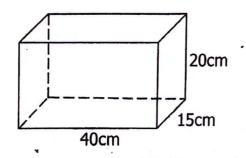
14. Find the next two terms of the arithmetic sequence below.

2, 4, 8, 16, 32, ......

15. Workout:  $\frac{1}{2} \div \frac{3}{4}$ 



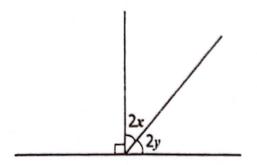
16. Calculate the amount of space contained in the solid figure below.



17. On her way from Masaka to Ntungamo, Sarah had covered  $\frac{2}{3}$  of the journey and was left with 18km to cover. How long was the journey?

18. The cost of three fountain pens is Sh.1,800. How many pens can be bought with Sh.4,200?

19. In the figure below, x is  $15^{\circ}$ . Use it to find the value of y



20. In Luddo competition, a player rolled a dice once with the intention of getting a prime number on top. What is the probability of the player getting what he wanted?



## **SECTION B: 60 MARKS**

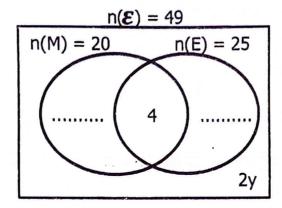
Answer **all** questions in this section Marks for each question are indicated in brackets.

21. a) Express  $4\frac{1}{5}$  as an improper fraction (02 Marks)

b) Arrange  $\frac{2}{3}$ ,  $\frac{1}{4}$ ,  $\frac{1}{2}$  in ascending order (03 Marks)

- In a class of 49 pupils, 20 like Mathematics(M), 25 pupils like English (E), 4 pupils like both while 2y pupils like neither Mathematics nor English.
  - a) Using the above information, complete the Venn diagram below.

(02 Marks)



b) How many pupils like neither Mathematics nor English? (02 Marks)

c) Find the probability of picking a pupil who likes only one subject from the class to be a class prefect. (02 Marks)



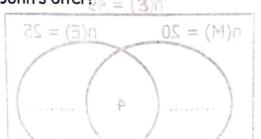
23. a) Write 150 in Roman numerals.

(01 Mark)

b) Find the product of the value of 2 and the value of 8 in the number 4820. (03 Marks)

24. A trader wanted to sell his mattress to the highest bidder. Agume's offer was Sh.40,000 more than what John offered while Otim's offer was double John's offer. If Agume offered Sh.120,000 for the mattress;

a) How much did John's offer? (02 Marks)



b) If the trader sold the mattress to Otim, at how much did he sell the mattress? (02 Marks)



25. a) The length of one side of a regular hexagon is 3cm. Using a ruler, pencil and a pair of compasses only, construct the above hexagon in a circle. (04 Marks)

b) Workout the total distance around the Regular Hexagon above.
 (01 Mark)

26. The table below shows marks scored by some boys in the Beginning of Term One, 2024 Mathematics paper

| John | Alex | Simon | Paul   | Bruno | Patu | Ronald |
|------|------|-------|--------|-------|------|--------|
| 50   | 40   | 65    | ,,,,,, | 40    | 60   | 40     |

a) If their total mark altogether was 350, find the median score. (03 Marks)

b) Calculate the mean score

(02 Marks)

c) What was difference between the highest and least mark scored? (01 Mark)



27. a) Work out: 3 3 4<sub>five</sub> +1 2 3<sub>five</sub>

(02 marks)

b) Given that  $34_t = 35_{ten}$ , find the value of t

(02 Marks)

- 28. The table below shows the distance covered by a driver on his way from Mbale to Kampala through different towns.
  - a) Study and complete the table below

(06 Marks)

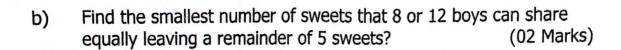
| Town             | Distance | Speed   | Time              |
|------------------|----------|---------|-------------------|
| Mbale – Iganga   | 132km    | 66km/hr | 2hrs              |
| Iganga – Jinja   | 40km     | km/hr   | 48 minutes        |
| Jinja – Lugazi   | 30km     | 60km/hr | hr                |
| Lugazi – Mukono  | km       | 50km/hr | $\frac{1}{2}$ hr  |
| Mukono – Kampala | 27km     | 18km/hr | $1\frac{1}{2}$ hr |

| _ | - | _ | -   |
|---|---|---|-----|
|   |   |   | - 1 |
|   |   |   | -1  |
|   |   |   | - 1 |
|   |   |   | - 1 |
|   |   |   | _   |

- 29. Martin loaded 6 bags of salt each weighing 6500 grams on a wheelbarrow.
  - a) Find the weight of the salt Martin loaded on the wheelbarrow in Kilograms. (03 Marks)

b) If the wheelbarrow when fully loaded with salt weighs 45kg.
Find the weight of the wheelbarrow when empty. (02 Marks)

| 30. | a) | Find the Greatest Common Factor (GCF) of 126, 90 | and 72.    |
|-----|----|--|------------|
|     |    |  | (02 Marks) |





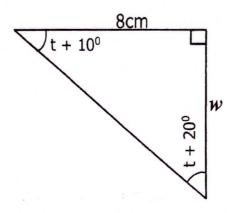
(02 marks)

b) Below is how Airtel charges for Local and International calls.

|                     | Charge per Minute |
|---------------------|-------------------|
| Local calls         | Sh.330            |
| International calls | Sh.1,000          |

Joan spoke for 2 hours to her friend in Canada and 30 minutes to her mother in the village. How much was her telephone bill?
(03 Marks)

32. Below is a triangle which occupies an area of the 36cm<sup>2</sup>. Use it to answer the questions that follow.



a) Calculate the value of t.

(03 Marks)

b) Find the value of w.

(03 Marks)



**END**