SURE KEY EXAMINATIONS BOARD
PRIMARY SIX END OF TERM TWO SET II
2023
MATHEMATICS

Time Allowed: 2 hours 30 minutes

Admission 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** and **district name** on this 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** the working for both sections **A** and **B** must be shown in the spaces provided.

4. **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.

5. **No calculators** are allowed in the examination room.

6. Unnecessary **changes** in your work and handwriting that cannot easily be read may lead to loss of marks.

7. Do not fill anything in the table indicated: **"For Examiners' Use only"** and boxes

SECTION A: 40 MARKS

Answer **all** questions in this Section

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

1. Workout: 141 x 11.

2. Write Four hundred forty-four in Roman Numerals.

3. Given that Set Q= {the first 5 composite numbers}.
    Find the number of proper subsets in set Q .

4. Shade 25% of the diagram below.

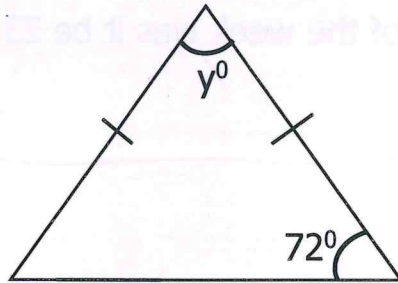5. Workout: (17 x 5) + (13 x 5) using distributive property.

6. Apollo travelled a distance of 50km in 150minutes. Find Apollo's speed in km/hr.

7. In the figure below. Find the value of **y** in degrees.

8. Musa went to the market and bought 3kg of sugar at sh.12000. If he went with three five thousand shilling notes, how much did he remain with?

9. Find the product of the next two numbers in the sequence below.

$$4, 6, 8, 9, 10, \text{.........} , \text{..........}$$

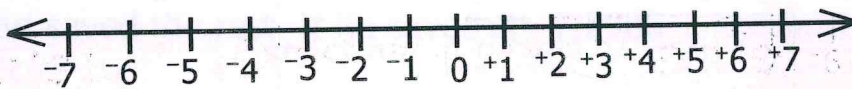10. If b = 2.4 and c = 4.8. Find the value of bc.

Turn Over

11. Using a pair of compasses, a ruler and a sharp pencil only, construct the suppplement of 60^0 in the space provided below.

12. If today is Sunday, what day of the week was it be 23 days ago?

13. Workout: $2 \times {}^+3$ using the numberline below.

14. Find the sum of the value of 6 and the place value 9 in the number 632294.

15. Nabirah, the Chef served 12600ml of milk at a party. How many litres of milk did she serve at the party?

16. The average of 3, 8, 12, x, 15 and 18 is 11. Find the value of x.

17. A mother is twice the age of her daughter. If their total age is 48, How old is the daughter?

18. Round off 4983 to the nearest hundreds.

19. John had some mangoes and ate $\frac{2}{6}$ of them, he then gave $\frac{1}{4}$ of the 4 remaining mangoes to Musa. Find the number of mangoes John had.

20. Shafik sold his shoes at sh.66000, making a loss of sh.34000. Find his percentage loss?

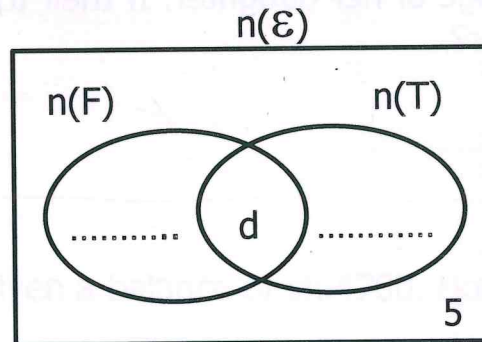**Turn Over**

SECTION B: 60 MARKS
Answer **all** questions in this section
Marks for each question are indicated in brackets.

21. In a group of 36 pupils, 21 play football (F), 19 play Tennis (T), d play both games while 5 play other games.

    (a) Use the above information to complete the Venn diagram below.
    (02 Marks)

    n(ε)

    n(F)   n(T)

    .... d ....
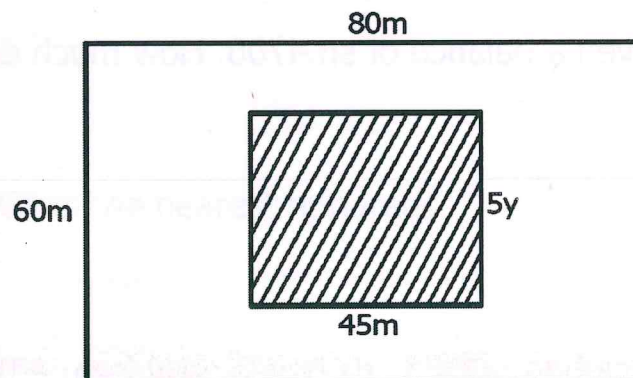
    5

    (a) How many pupils play both games? (02 Marks)

    (b) If Sarah is picked at random, find the probability that she plays one game. (01 Mark)

22. (a) Workout $4 + 3 = $ ___ (finite 6) using a dial. (02 Marks)

6

(b)   Given that $52_k = 200_{four}$. Find the base represented by k. (03 Marks)

23.   The diagram below shows a rectangular room with a square carpet in the middle. Zahanda decided to cement the floor that was not covered by the square carpet. Use it to answer the questions that follow.

(a)   Find the value of **y** in centimeters.   (02 Marks)

(b)   Find the area of the cemented part in square meters.   (03 Marks)

Turn Over

24. Peter bought the following items from a supermarket.

   3kg of sugar at sh.4500 per kg

   $1\frac{1}{2}$ kg of rice at sh.2600 for half a kg.

   8 oranges at sh. 500 per 2 oranges

   (a) How much does she spend if she is to buy 2kg of rice and the oranges.
   (03 Marks)

   (b) If he was given a balance of sh.4700. How much did he have at first?
   (03 Marks)

25. Aminah is 18 metres taller than Shamran while Annet is 18 metres shorter than Shamran. If Shamran is 36 metres tall.
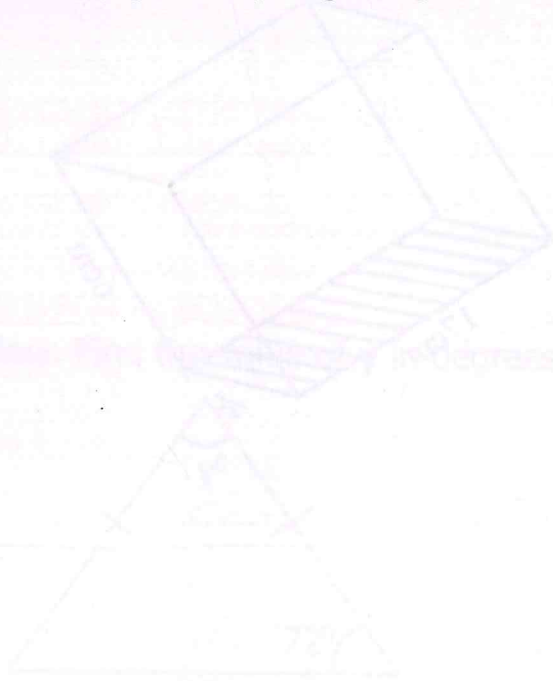
   (a) Find the total height of Amina and Annet.
   (03 Marks)

   (b) Workout their average height.
   (02 Marks)

8

26. (a) Using a pencil, a ruler and a pair of compasses, construct a right angled triangle where line PQ = 6cm, angle PQR= 60^0. (04 Marks)

   (b) Find the length of lines in centimeters. (02 Marks)

      i) QR ....
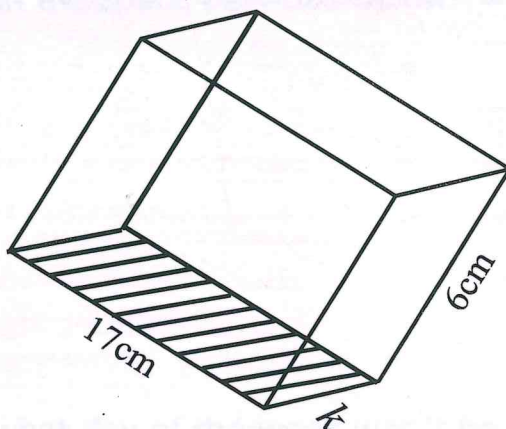
      ii) PR ....

27. Given the number **5.748.**

   (a) What is the place value of **8** in the number above? (01 Mark)

   (b) Find the quotient of the value of 4 and 8 in the number above? (03 Mark)

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28. The volume of the cuboid below is 918cm³. Find the area of the shaded part. (04 Marks)

29. John used $\frac{1}{3}$ of his salary on buying clothes, $\frac{1}{4}$ on food and $\frac{1}{6}$ on transport and saved the rest. If he saved sh. 7,2000.

(a) Calculate his total salary (03 Marks)

(b) How much more did he spend on food than on transport? (03 Marks)

30. Namiyonga P/S is 540km away from Kulikulinga P/S. A school bus travelled at a speed of 135km/hr from Namiyonga P/S to Kulikulinga P/S for a Quran Contest at exactly 7:00 a.m.

   (a) At what time did the school bus reach Kulikulinga P/S?   (02 Marks)

   (b) If the Quran Contest was scheduled to start XX:00 a.m. and Namiyonga pupils arrived $1\frac{3}{5}$ hours late. At what time was the Contest scheduled to begin?   (02 Marks)
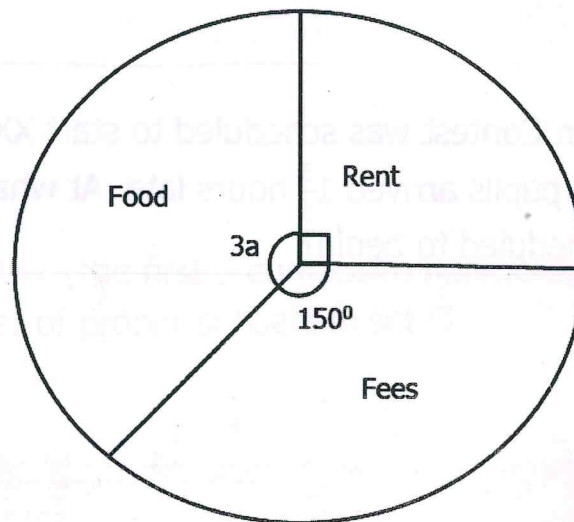
31. In a primary school, two bells for lower and upper primary ring at intervals of 30 minutes and 40 minutes respectively.

   (a) After how long will the two bells ring together?   (03 Marks)

(b)   If they first rung together at 8:30a.m. at what time do they ring together again?   (02 Marks)

32.   The circle graph below shows how Mr.Sulaiman spends his monthly income of sh. 720,000.

(a)   Find the value of a.   (02 Marks)

(b)   How much more money is spent on fees than on food?   (03 Marks)

12   END