HILLSIDE PRIMARY SCHOOL

# BEGINNING OF TERM TWO EXAMINATIONS

## 2024

## MATHEMATICS (SET SEVEN)

*Time Allowed: 2 Hours 30 Minutes*

**Index No.** | | | | | | | | | |

**Candidate's Name**.....

**Candidate's Signature**.....

**Stream**.....

**Read the following instructions carefully:**

1. The paper has **two** sections: **A** and **B**. Section A has 20 questions and Section B has 12 questions
2. Answer **all** questions. All answers to both sections **A** and **B** must be written in the spaces provided.
3. **All** working must be done using a blue or black ball-point pen or fountain pen. Any work written in pencil other than graphs and diagrams will not be marked
4. No calculators are allowed in the examination room.
5. Unnecessary changes in work may lead to loss of marks. Any handwriting that cannot easily be read may lead to loss of marks.
6. Do not fill anything in boxes indicated: **"For Examiners' Use Only"** and those inside the paper.

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

## SECTION A: 40 MARKS

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

***Questions 1 to 20 carry 2 marks each***

1. Work out: $33 \times 2$.

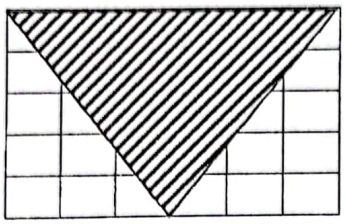
2. Round off 7.896 to the nearest whole number.

3. How many bottles of 1.5 litres can be got from 6000ml?

4. Find the quotient of CCXCIV and III.

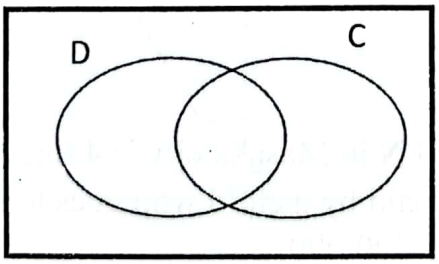
5. A fair dice is rolled once. Find the probability that a number shown on top is above the first composite number.

6. Find the percentage of the rectangle not shaded.



7. Two bells ring at intervals given a ratio of 3:4 respectively. If their GCF is 10 minutes. Find the interval at which the two bells ring.

8. In the Venn diagram below, shade the region (D only Union C only)



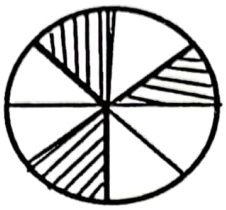
9. The temperature on top of a mountain was $^{-}4^{0}$c. The temperature decreased to $^{-}9^{0}$c. What was the decrease in temperature?

10. The area of a square is **r** $dm^2$ and its perimeter is **r** dm. Find the value of r.

11. Moses bought a shirt at sh. 54, 000 and later sold it making a profit of $\frac{1}{9}$ the buying price. Find how much he sold the shirt.

12. The school fees in school **N** in Masaka city is 4 times that one of **F.** Find the amount of money paid by a child who goes to school **F**, if the difference in structure is sh. 900,000.

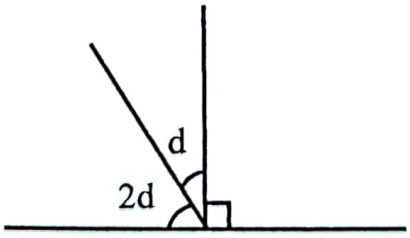
13. The shaded part in the figure below represents the number of girls in a mixed school.



If there are 580 boys, how many pupils are in the school?

14. Mayinja started revising at 10:35 p.m. on Tuesday and stopped revising at 3:30 a.m. of the next day. For how long did he revise?

15. Find the value of d.



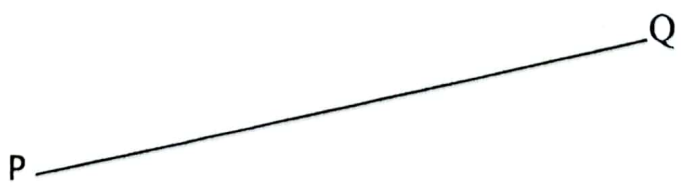
16. Find the single number written in standard form as $6.472 \times 10^4$.

17. Opio covered 5km in 1hr. 15minutes . Calculate his speed

18. A car uses 6 litres of fuel to cover a distance of 120km. Find the amount of fuel needed to cover 40km.

19. Subtract: $2(c + 6)$ from $6(c - 8)$.

20. Using a pair of compasses, a ruler and a pencil only draw a perpendicular bisector of line PQ.



## SECTION B: 60 MARKS

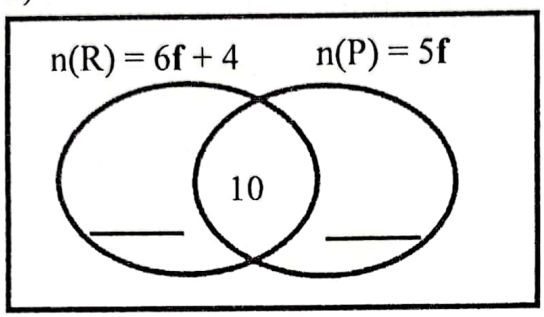
***Answer all questions in this section***

***Marks for each question are indicated in the brackets***

21. During Mr. Walimbwa's graduation party, $(6f + 4)$ guests ate rice (R), $5f$ ate potatoes (P) and 10 ate both types of food.

a) Complete the Venn diagram below

$n(\varepsilon) =$




**(2 marks)**

**b)** If 39 guests ate one type of food only, find the value of **f. (2 marks)**

**c)** How many more guests ate rice than potatoes? **(2 marks)**

22. a) Change $627_{eight}$ to base ten. **(02 marks)**

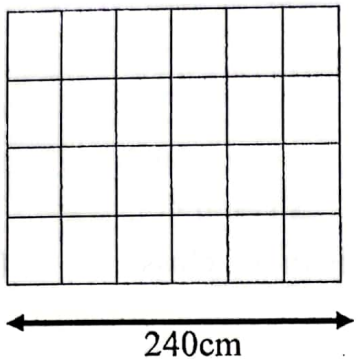
**b)** Work out: $442_{six} \div 22_{four}$ (Give your answer in ternary base) **(03 marks)**

23. The median of 4 consecutive odd numbers is 14.

a) Find the numbers. **(04 marks)**

b) Calculate their range. **(02 marks)**

24. The figure below shows square tiles laid in a rectangular room of length 240cm as shown in the diagram. Study the diagram and answer the questions that follow.




a) Find the width of the room. **(02 marks)**

b) Calculate the area of one tile **(02 marks)**

c) Work out the distance around the room **(02 marks)**

25. In a class, there are 20% more girls than boys. The class has 54 girls.

a) What percentage are boys? **(02 marks)**

b) Calculate the total number of pupils in the class. **(02 marks)**

26. Tamara went for shopping and bought the following items:

3kg of sugar at sh. 2,400 per kg.
500g of salt at sh. 1,200 per kg.
12 oranges at sh. 3,000 for every 3 oranges.
2 tins of prestige at sh. 10,000.

a) What was her total expenditure? **(04 marks)**

b) If she was given a discount of sh. 3,000. Find her actual expenditure.
**(02 marks)**

27. a) Using a ruler, a pencil and a pair of compasses only, construct a triangle XYZ, in which line YZ=7cm, angle ZYX = $60^0$ and angle YZK = $45^0$.
**(04 marks)**

b) measure angle YXZ
**(01 mark)**

28. A car left town B at 8:45 p.m. for town C and arrived at 2:00 a.m.

a) Convert the departure time of the car from town B into 24-hour clock. **(02 marks)**

b) How long did the journey take? **(02 marks)**

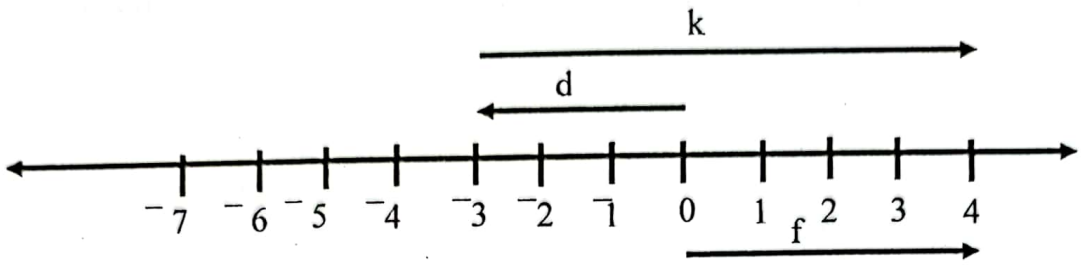
c) If the car was moving at a steady speed of 90km/hr. How far is town B from C. **(02 marks)**

29. A shirt costs three times the as much as a short. A belt costs sh. 5,000 less than a short. If the cost of a shirt is twice as much as the cost of a short and a belt. Find the cost of a shirt. **(04 marks)**

30. a) Expand 3.541 using values. **(02 marks)**

c) Prime factorise 144 and write your answer in power form.
**(02 marks)**

31. Study the number line below and answer the questions that follow.




a) Name the integer represented by arrow: **(01 mark@)**

I) k _____

II) d _____

III) f _____

b) Write a mathematical statement shown on the given number line.
**(01 mark)**

32. The table below shows marks scored by some pupils in the beginning of term two examinations. Study it and answer the questions that follow.

| Marks | 90 | 60 | 80 | 70 |
|---|---|---|---|---|
| Number of pupils | 2 | 5 | 4 | 4 |

a) Find the modal frequency. **(01 mark)**

b) Find their range. **(01 mark)**

c) Calculate the average mark. **(02 mark)**

**END**