



HILLSIDE PRIMARY SCHOOL

EXAMINATIONS

2023

MATHEMATICS (SET SIX)

Time Allowed: 2 Hours 30 Minutes

Index No.

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Candidate's Name.....Stream.....

Candidate's Signature.....

EMIS No.....

District Name.....

Read the following instructions carefully:

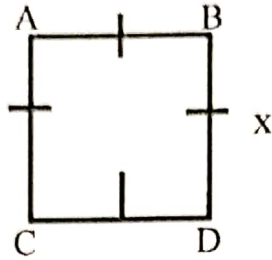
1. The paper has **two** sections: **A** and **B**.
Section A has 20 questions and Section B has 12 questions
2. Answer **all** questions. All answers to both sections **A** and **B** must be written in the spaces provided.
3. **All** working must be done using a blue or black ball-point pen or fountain 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

1. Work out: $45 + 7$
2. Write in figures: Nine hundred nine thousand forty
3. Simplify: $9d - (3d - 6)$
4. Draw a Venn diagram to show that $n(\text{PUQ}) = n(\text{P})$
5. Work out: $-5 - -8$

6. Find half of the side x of the figure ABCD of area 64cm^2 .



7. Decrease 1000kg in the ratio of 3:5

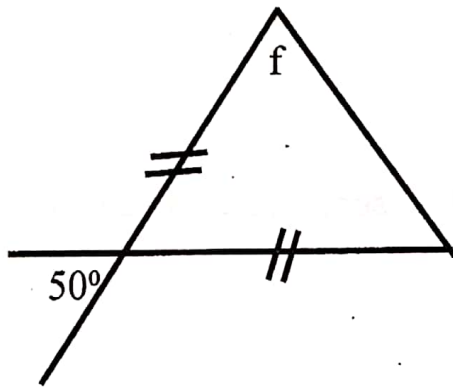
8. A meeting started at 9:50a.m and ended at 10:15 a.m. How long was the meeting?

9. Calculate the circumference of a semi-circle whose diameter is 21dm.

10. The cost of a book is five times as much as a pen. If they both cost Sh.60,000 what is the cost of the book?

11. In a meeting of 54 teachers, $\frac{4}{9}$ of them are male. What is the probability of a female becoming a secretary of the meeting?

12. Find the size of the angle marked f in the diagram below.



13. Write 449 in Roman Numerals

14. Peter got a loan of sh.500,000 at a rate of 5% per year in a period of 6 months. Find the interest.

15. Find the range of the following numbers.

5, +2, -1, 0, -2

16. Mugisha covered 500 metres in 50 seconds. Find his speed in kilometre per hour (km/hr)

17. Using a ruler, a pencil and a pair of compasses only, construct an angle of 135° in the space below.

18. Given that: $y^2 + y^2 = 98_{\text{ten}}$, find the value of y .

19. A school has enough food to last 200 pupils for 3 days. How long will the food last if 100 more pupils join the school?

20. What is the 100th triangular number?

SECTION B: 60 MARKS

21. Mellisa bought the items in the table below from Kawempe market.

| Item | Quantity | Unit cost | Amount |
|-------------|-------------------|--------------|-----------|
| Maize flour | 2kg | Sh.3500 @ kg | Sh. _____ |
| Beans | $3\frac{1}{2}$ kg | Sh. _____ | Sh.10,500 |
| Soap | _____ bars | Sh.4000 | Sh. _____ |
| Meat | 1500gm | Sh.8000 @ kg | Sh. _____ |
| Total cost | | | Sh.41,500 |

(a) Complete the table.

(5marks)

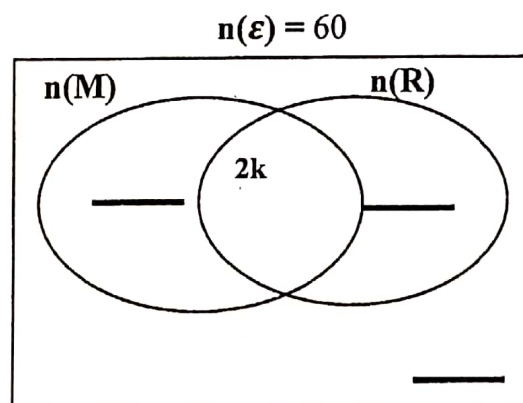
(b) How much money did Mellisa pay if she was given a discount of 20%?

(1 mark)

22. In Kira Primary school, the ratio of boys to girls is 3:7. If there are 72 more girls than boys, find the total enrolment of the pupils in the school.
(4marks)

23. In a class of 60 pupils, 35 like Rice (R) 30 like Matooke (M), $2k$ like both meat and beans while $\frac{6}{5}$ pupils like neither of the two.

a) Represent the above information on the Venn diagram below.
(3marks)

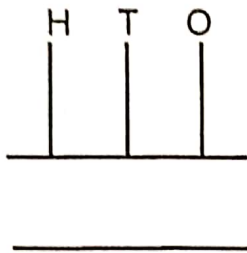


b) Find the value of k .
(2 marks)

24. a) Solve for y : $301_y = 76_{\text{ten}}$

(3marks)

b). Show 2202_{five} on the abacus below
(2marks)



25. In a class, there are 640 pupils, $\frac{5}{8}$ of the pupils are girls and the rest are boys. If $\frac{1}{4}$ of the boys and $\frac{3}{5}$ of the girls like playing football, how many pupils do not like playing football? (4 marks)

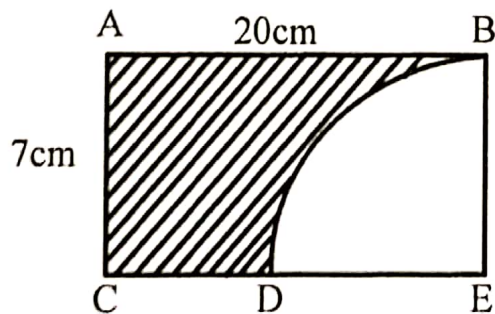
26. Below is a table of marks scored by pupils in a certain test. Use it to answer the questions that follow.

| | | | | |
|--------------|----|----|----|----|
| Marks | 90 | 50 | 40 | 60 |
| No of pupils | 2 | 4 | 1 | 3 |

- a) How many pupils scored above 55? (2marks)

- (b) Find the average mark. (3 marks)

27. Below is figure ABCE. Study it and answer the questions that follow.



- a) Calculate the distance around figure BDE. (2 marks)

b) Calculate the area of the shaded part.

(3marks)

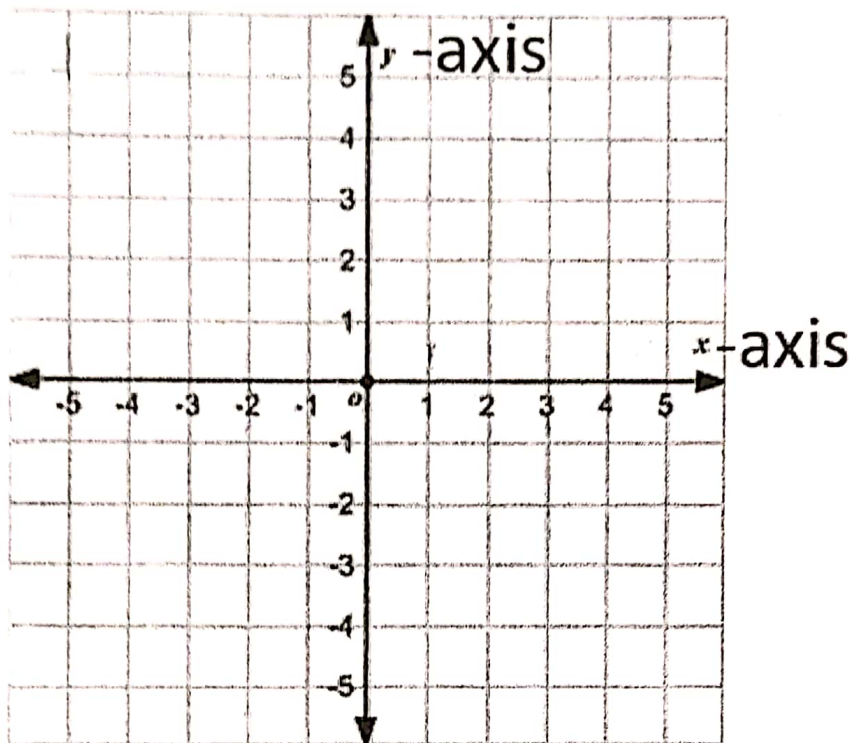
28. Simplify: $\frac{0.24 \times 0.12}{0.06 \times 2.4}$

(3 marks)

b) Change 0.181818... to a common fraction.

(2 marks)

30. a) Plot the following points on the co-ordinate graph below.
K (-4,3) L (-1,3) M (-4,-1) and N (3,-1) (4 marks)



- b) Join K to L, L to N, N to M, M to K (1mark)

- c) Name the figure formed. (1mark)

29. Three girls; Maria, Glory and Alma shared 210 pencils. Maria got twice as much as Glory and Alma got 30 pencils more than ^{Maria}~~Alma~~. How many pencils did each girl get? (5 marks)

31. A motorist drove at 60km/hr for 3 hours from A to town B. He continued to town C at 80km/hr for 2 hours.

a) Find the total distance covered from A to C. (3 marks)

b) Calculate the average speed for the whole journey. (2 marks)

32. a) Solve: $2p + 4 = 2 \pmod{6}$.

3marks.

b) If today was a Wednesday, what day of the week would it be after 31 days?

(2 marks)

END