



PURSUIT OF EXCELLENCE EXAMINATIONS BOARD

PRIMARY LEAVING MOCK EXAMINATION

2024

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Random No.						Personal No.		

Candidate's Name:

Candidate's Signature:

District Id No.

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Read the following instructions carefully:

1. Do not write your **school** or **district name** anywhere 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 **Printed pages** altogether.
3. Answer **all** questions. **All** answers to both Sections **A** and **B** must be written in the spaces provided.
4. All answers **must** be written using a **blue** or **black** ball point pen or ink. Any work written in pencil will **not** be marked.
5. Unnecessary changes in your work and handwriting that cannot be read easily may lead to loss of marks.
6. Do not fill anything in the table:
"FOR EXAMINER' use only" and boxes inside the question paper.

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

Tel: 0789522801/ 0751522801

SECTION A: 40 MARKS

Answer all questions in this section

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

1. Subtract 19 from 31

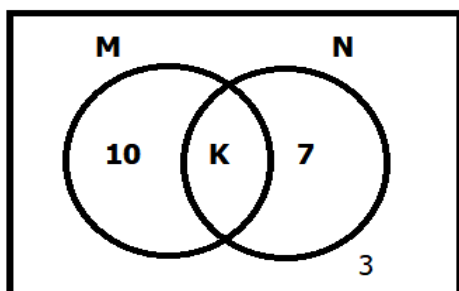
2. Write "Six thousand, three hundred seventy three" in figure

3. Work out: $110_{\text{two}} \times 11_{\text{two}}$

4. Simplify: $4m - 3n + 3m - n$

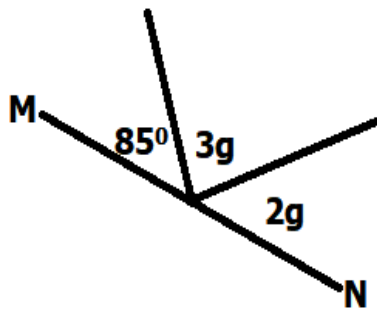
5. Study the Venn diagram below and find the value of **K**.

$$\Sigma = 33$$



6. Solve for **r**: $3^r + 3^4 = 81$

7. Find the value of **g** in degrees if **MN** is a straight line.



8. Express $1\frac{3}{5}$ as a percentage

9. Find the range of the following numbers: 5, 1, 4, 6, 9, 3, 8, 2

10. The probability of a Volley ball team winning a game is "three fifth." If the team plays 15 games, how many games is the team expected to win?

11. Musa bought a new shirt at sh. 25,000. After a month he sold it at a loss of sh. 3,500. What price did he sell the shirt?
12. It is December. What month of the year will it be 64 months to come?
13. A circle of radius 3.5 cm subtends an angle of 60° at the centre. Calculate the area of the minor sector. (Use $\pi = \frac{22}{7}$)
14. Using a pencil, a ruler and a pair of compasses only, construct a complementary angle of 60°
15. Find the square root of **0.16**

16. Tom's digital watch show 3:45pm. If Sadat uses 24 hour clock but in the same time zone with Tom, what time would Sadat's watch display?

17. Find the product of the place value of 3 in the number 26.3 and the place value of 9 in the number 973.8.

18. Work out using distributive property: $(32 \times 10) + (10 \times 6)$

19. Mpindi ate $\frac{9}{11}$ of his cake. Change the remaining fraction in decimals.

20. If $c = -3$, $d=6$ and $e=-2$, find the value of $\frac{d (ce)}{e}$

SECTION B: 60 MARKS

Answer all questions in this section

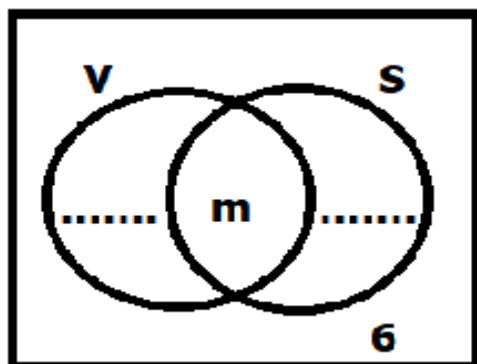
Marks for each question are included in the brackets

21. In a village, 51 children were selected to participate in selected sports activities. 28 participated in Volleyball (**V**), 29 participated in Soccer (**S**), **m** participated in both Volleyball and Soccer while 6 did not participate in any of the two sports activities.

(a) Use the information given to complete the Venn diagram below.

$$n(\Sigma) = 51$$

(2 marks)



(b) Find the value of **m**

(3 marks)

22. (a) The difference of $\frac{2m}{5}$ and $\frac{m}{3}$ is 2. Find the value of **m** (2 marks)

(b) Solve: $2(p+1) + (p+3) = 2(p+3)$

(2 marks)

23. The average mass of 4 girls: Akech, Carol, Aisha and Irene is 70kg.
Akech is 60kg and Carol is 90kg.

(a) Find the mass of Aisha if Carol is as heavy as Irene (3 marks)

(b) Find the range mass of the four girls.

(2 mark)

24. The capacity of a cylindrical tin is 88 litres and has a height of 70cm

(a) What is the volume of the cylindrical tin?

(2 mark)

- (b) Find the radius of the cylindrical tin. (Take $\pi = \frac{22}{7}$)
(3 mark)

25. A bus moved at a speed of 80km/hr arrived at Kampala at 3:30pm after leaving Lira at 7:30am.

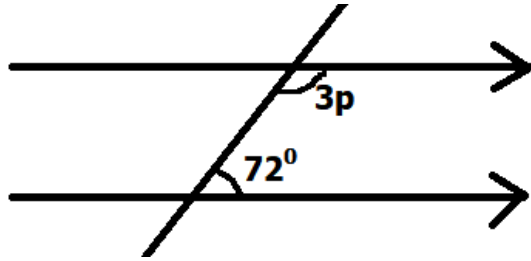
- (a) What is the distance between Kampala and Lira town?
(2 marks)

- (b) If the bus returned using the same route for only 1 and a half hours, work out its average speed for the whole journey.
(2 marks)

26. (a) The complement of $2x - 10^\circ$ is 50° . Find the value of x . (2 marks)

(c) Calculate the value of **p**

(2 marks)



27. Mr. Mugagga spent $\frac{11}{36}$ of his monthly salary on food, $\frac{1}{8}$ on rent, $\frac{1}{3}$ on transport and $\frac{17}{72}$ on saving. By using a radius of 3cm, construct a pie chart showing the expenditure of Mr. Mugagga's salary.

(5 marks)

28. Mpaata got a loan of sh.500,000 from Equity Bank which charges a compound interest of 24% per annum. How much interest did he pay after 2 years? (5 marks)

29. (a) Work out: $8 \times 10^4 \times 6 \times 10^{-6}$ in standard form. (2 marks)

(b) Work out 3×-4 using a number line. (3 marks)

(c) Expand 0.0082 using values (2 marks)

30. (a) Work out : $\frac{0.28 \times 0.08}{1.4 \times 0.4}$

(3 marks)

(c) Work out: $1\frac{2}{5} \times 1\frac{1}{2} \div 3\frac{1}{2}$

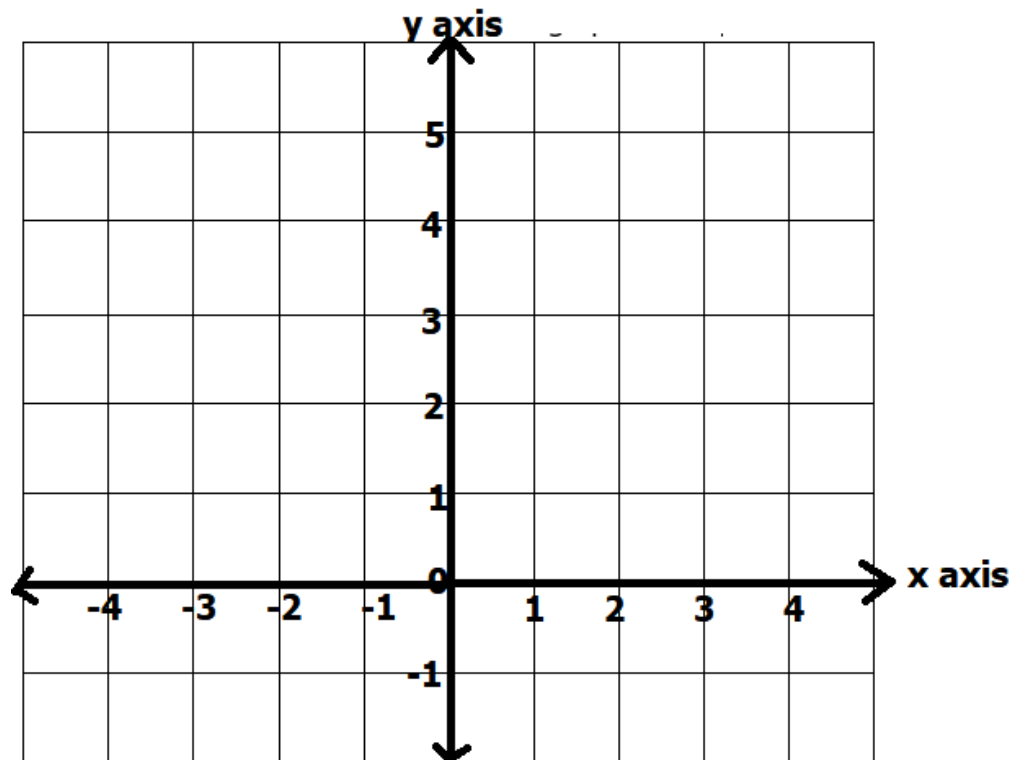
(3 marks)

31. (a) The scale of a map is 1:20000, find the actual distance in km if the map distance is 6.5cm. (2 marks)

(b) The distance from Kampala via Mbarara to Bushenyi is 250km. find the corresponding representative distance in centimetres on the map whose scale is 1:5,000,000 (2 marks)

32. Given the coordinates $A(0, 1)$, $B(-2, 5)$ and $C(2, 5)$.

- (a) Plot the coordinates above on the grid graph below. (3 marks)



- (b) Join A to B, B to C and C to A and name the shape formed (1 mark)

- (c) Find the area of the figure formed (2 marks)

END