

BUGANDA EXAMINATIONS COUNCIL (BECO)

PRIMARY SEVEN MOCK EXAMINATIONS - 2024

MATHEMATICS

Time Allowed: 2 hours 30 minutes.

Name:

School Name.....

District

READ THE FOLLOWING INSTRUCTIONS: -

1. The paper has **two Sections A and B**.
2. Section **A** has **20 questions (40 marks)**
3. Section **B** has **12 questions (60 marks)**
4. Attempt **all** questions. All answers to both sections **A** and **B** must be written in the spaces provided.
5. All answers must be written using a blue or black ball-point pen or ink.
Diagrams should be drawn in pencil.
6. Unnecessary changes of work may lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks
8. Do not fill anything in the boxes indicated for examiner's use only.

FOR EXAMINERS' USE ONLY

Number	Marks	Sign
1-10		
11-20		
21-30		
31-32		
TOTAL		

SECTION A

1. Work out: $84 - 23$
2. Given that $K = \{all\ prime\ numbers\ between\ 60\ and\ 70\}$
Find $n(K)$
3. Write 1111_{two} in base ten.
4. Work out: $1 \div 3$ (finite 5)
5. Simplify $\frac{1}{2} + \frac{2}{3}$
6. Write seventy thousand seven hundred seven in figures

7. Solve $3^p \times 3^p = 81$

8. Calculate the supplement of 69°



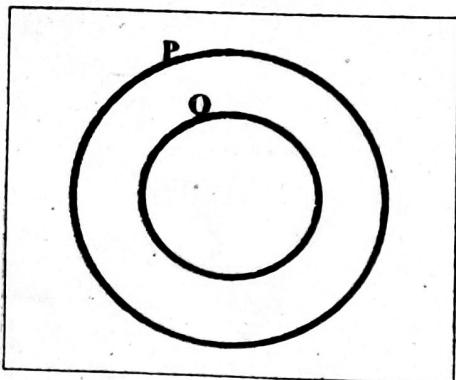
9. Find the mode of 2, 5, 3, -3, 2

10. Simplify $5 - 3(2k - 3k) + 4$

11. Find the sum of the second and the missing numbers in the sequence:

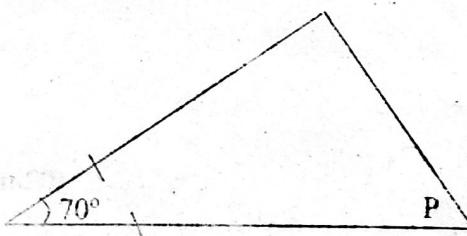
132, 101, 72, 49, _____

12. On the Venn diagram below, shade the region $P \cap Q = Q$



13. A taxi left Jinja at 8.45pm and reached the station at 12.00 mid night. How long was the journey?
14. A rectangular garden has a width of 65 metres and length of 35 metres. A farmer fixed poles 5m apart to fence the garden. How many poles did the farmer fix?
15. Without using a pair of compasses, draw an angle of 165°

16. A driver bought 6 litres and 850 millimetres of petrol on his way and another 7 litres and 590 milliliters on his way to Gulu. How much petrol did the driver buy altogether?
17. Solve $6 - 5r < 21$
18. Juma had 2 notes of shs. 20,000 each and bought a book for shs. 37,500. How much money did he remain with?
19. Work out: $2.21 \div 1.7$
20. Find the value of P in the figure below

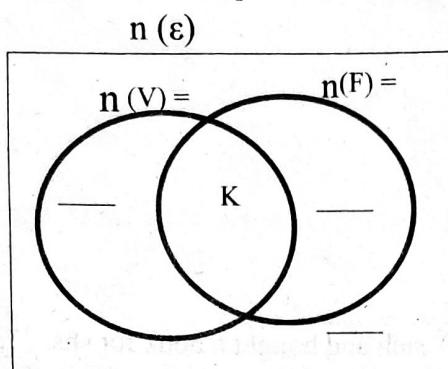


SECTION B

Attempt all the questions in this section. Marks for each question are indicated in brackets

21. In a class of 60 pupils, eight pupils do not like any game, 15 like volley ball only (V),
25 + k like football only (F) while K like both games

- (a) Use the given information to complete the Venn diagram below. (03marks)



- (b) Find the value of K. (02marks)

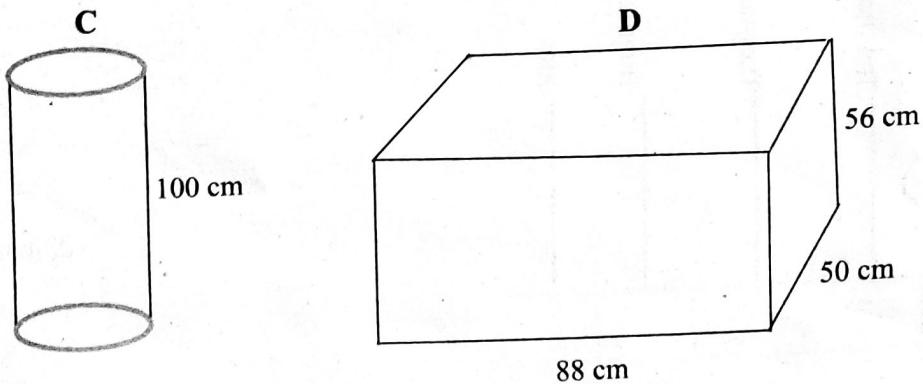
22. Nakato is 16 years older than Adeke. In five years' time, Nakato will be three times as old as Adeke

- (a) How old is each of them now? (03marks)

- (b) Find the age of Nakato in four years' time. (02marks)

23.

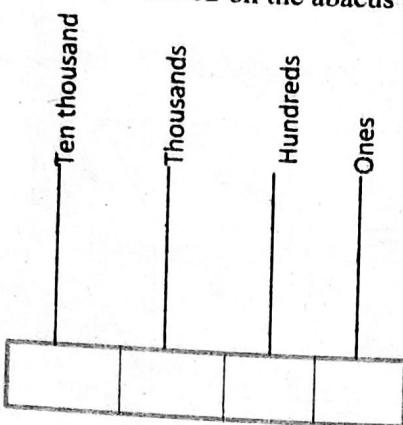
The tanks C and D hold the same amount of water when completely full. Use the diagram to answer the question that follow.



- (a) Work out the number of litres of water the tank holds when completely full. (03marks)

- (b) Find the diameter of tank C. (Take π as $\frac{22}{7}$) (02marks)

24. Draw beads to show 34502 on the abacus below
(a)



(03marks)

- (b) Find the product of the value of three and the value of five.

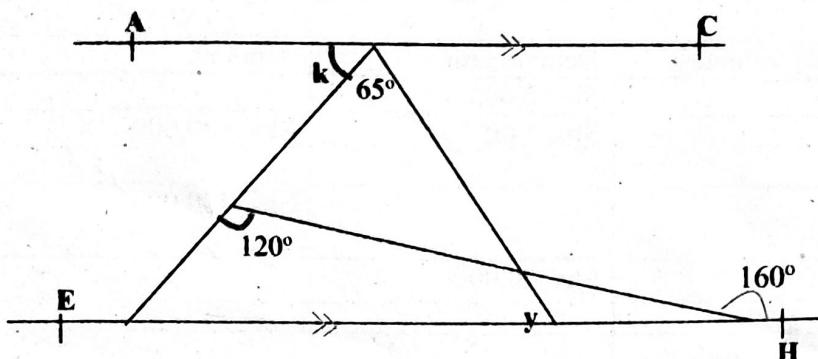
(02marks)

25. The school received books which they distributed to four streams; Cream, Orange, Green and pink in the ratio 1: 2: 3: 9 respectively.

Represent the above information on a pie chart of radius 4cm.

(05marks)

26. In the figure below, lines A.C and EH are parallel. Use it to answer the question that follow.



(a) Find the value of K. (02marks)

(b) Work out the size of the angle marked with letter Y. (02marks)

30(a) Express $\frac{2}{3}$ as a decimal. (02marks)

(b) Work out $\frac{0.8+2.43}{3.23-1.33}$

31(a) The diagonals of a Rhombus KPQR bisect each other. Using a pair of compasses, a ruler and a pencil only construct a Rhombus where KQ = 8cm and PR = 6cm.

(b) Measure line KP

32. The time table below shows a flight from Kigali to Entebbe through Nairobi

Airport	Departure	Arrival
Kigali	1830 hours	
Nairobi	1930 hours	1915 hours
ENTEBBE		2000 hours

- (a) Express the arrival time at Entebbe in 12-hour clock (02marks)
- (b) How long does the plane take at Nairobi? (02marks)
- (c) Calculate the time the plane takes from Kigali to Entebbe. (02marks)

END

27. The table below shows a summary of a certain collection for a class visit.
Use it to answer the questions that follow

No. of notes	Denomination	Amount
6	Shs. 2,000	Shs. 300,000
	Shs. 5,000	
8		Shs. 400,000
12	Shs. 20,000	
	Shs. 1,000	
TOTAL		Shs. 1,000,000

Complete the table

28. A woman deposited shs. 600,000 in a bank at an interest rate of $2\frac{1}{2}\%$ per year for 9 months. She then withdrew 80% of the amount she had on the account. Find the amount of money that remained on the account. (04marks)
29. At a certain school, three bells are rung at the same time. The first bell rings at an interval of 12 minutes, second bell 18 minutes and third bell 20 minutes. If they rang together at 4.20p.m the third time, when did they ring together the first time? (04marks)