

# KAYUNGA DISTRICT EXAMINATION BOARD

## PRIMARY SEVEN MOCK EXAMINATION 2024

### MATHEMATICS

Time allowed: 2 Hours 30 Minutes

RANDOM No.						Personal No.		
Index number								

Candidate's Name: \_\_\_\_\_

Candidates' Signature: \_\_\_\_\_

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.**

READ THE FOLLOWING INSTRUCTIONS CAREFULLY:

1. This paper has two section: **A** and **B**.
2. Section **A** has 20 questions (40 marks)
3. Section **B** has 12 questions (60 marks)
4. Attempt all questions in both sections.  
All answers to all questions must be written in the space provided.
5. All answers must be written using **blue** or **blackball pen** or **ink**. Only diagrams and graph work must be done in pencil.
6. Unnecessary **crossing** of work will lead to loss of marks.
7. Any handwriting that cannot easily be 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		
QN. NO.	MARK	INITIALS
1-5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
<b>TOTAL</b>		

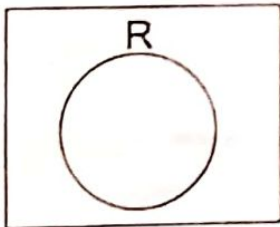
*Kayunga District Examination Board (2024 Mock Examination)*

**SECTION A: 40 MARKS**  
Attempt all questions in this section.  
Questions 1 to 2 carry two marks each.

1. Divide:  $16 \div 4$

2. Write 12013 in figures.

3. On the venn diagram below, shade set  $R'$



3. Simplify:  $-6 - +4$

5. Find the product of the first and the missing number in the serie below.

12, 13, 15, 18, \_\_\_\_



6. The examination that started at 10:30 am lasted for  $2\frac{1}{4}$  hours. Express the ending time in 24 hours clock system.

7. In the space below, construct an angle of  $105^\circ$ .

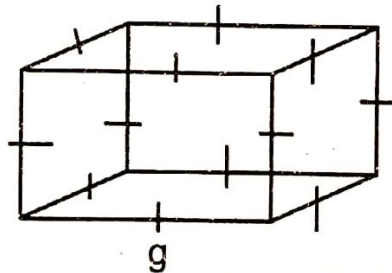
8. Given that  $m = \frac{1}{4}$  and  $n = \frac{1}{6}$ , Find the value  $\frac{m}{n}$

9. If  represents 8 pencils. Draw pictures to represent 32 pencils.

10. Given that 1 us dollar costs ug sh 4000 and Juma had ug sh 360000.  
How many us dollars would Juma pay for the bicycle at the same rate?



11. Below is a cube whose total surface Area is  $600\text{m}^2$ .



Find the value of  $g$ .

12. A subaru car uses 8 litres of fuel to cover a distance of 40km. How many litres of fuel does it need to move a distance of 120km?

13. Given that set Q has 31 proper subsets, how many elements are in set Q?

14. Convert  $14_{\text{five}}$  to a decimal base.

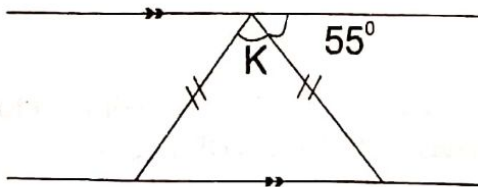
15. Work out  $2\frac{1}{2}\%$  as a fraction in its lowest terms.



16. Solve for x in  $5^{2x} \div 5^x = 125$

17. Subtract  $3m-5$  from  $4m+7$

18. Find the value of K in the diagram below.





19. A jerrycan was  $\frac{1}{2}$  full of water, when 24 litres were added it became  $\frac{5}{6}$  full. Calculate the capacity of the jerrycan.

20. Workout the average of 3, 4k, 5, 0 and K+7.



**SECTION B: 60MARKS**

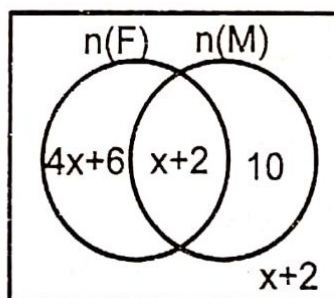
Attempt all questions in this section

21.a) Simplify:  $\frac{0.75 - 0.50}{0.12 + 0.13}$

(3 marks)

b) Express 0.2777- - - as a common simplified fraction. (2 marks)

22. At the teachers party, Fanta (F) and Mirinda (M) were served as seen in the venn diagram below.

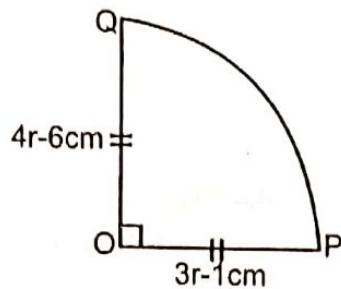


a) If the teachers who took Fanta only were the same as those who did not take Fanta. Find the value of x. (2marks)

- b) Workout the probabillty of choosing a teacher who took both drinks open up a dance at random. (3 marks)



23. Study the diagram below and use the information on it to answer the questions that may follow.



- a) Find the value of  $r$  (2 marks)

- b) Calculate for the length of arc PQ. (2 marks)

24. Mr Ziridamu went shopping and bought the following items.

2 litres of cooking oil at sh.3600 per litre.

$2\frac{1}{2}$  kg of millet flour at sh. 4800 per kg.

250 grams of rice at sh.4000 @ kg.

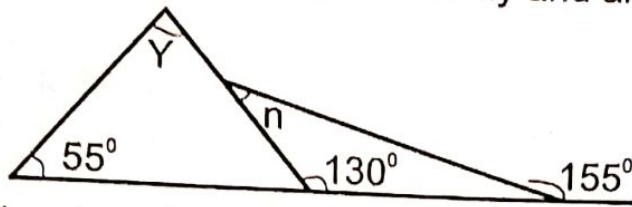
15 apples at sh.1500 for every 3apples.

- a) If he was given a discount of sh.2300. How much did he pay?

(6 marks)



25. Below is a diagram, study it carefully and answer the questions about it.



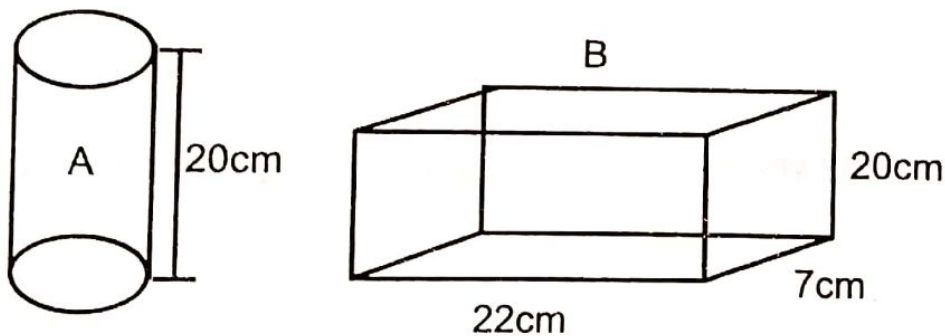
a) Find the size of angles marked:  
(i) Y

(2 marks)

(ii) n

(2 marks)

26. Below are solids A and B with the same amount of fuel.



a) Find radius of solid A.

(3 marks)

b) Calculate the T.S.A of solid A. (use  $\pi = \frac{22}{7}$ )

(2 marks)



7

27. A cyclist started his journey from town P at 6:30 am riding at speed of 50km/hr for 2 hours to town Q where he rested for an hour he then continued to town R a distance of 105km from town Q for 3 hours and then returned to town Q using the same route at a speed of 105km/hr.  
a) Find the average speed of the cyclist for the whole journey. (6 marks)

28. a) Write 2624 in scientific notation.

(2 marks)

b) Find the sum of the value 6 and the value of 2 in 7624. (3 marks)



29. During the population census held in May 2024, a certain village had 6000 people, of these  $\frac{2}{3}$  were females and  $\frac{1}{2}$  of the females were girls and a  $\frac{1}{4}$  of the males were boys.

a) Calculate the total number of boys and girls in the village. (4 marks)



b) Find the ratio of men to women in the village.

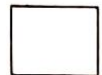
(1 mark)

30.a) solve for  $f$  in  $2(2f+3)-3(f-6)=30$

(2marks)

b) Babirye is 3 times as old as Kigongo. The product of their age is 48 years how old is each of them now?

(3marks)



31. Mukono is 60km away from Iganga on a bearing  $045^\circ$  and kampala is 45km from Mukono on a bearing of  $150^\circ$ . Using a scale of 1cm represents 10km.

a) Draw an accurate diagram to show the location of the three towns.  
(4 marks)

b) Find the shortest distance from Iganga to Kampala in km. (1 marks)

32. Given that  $3y+2=x$ , complete the table correctly.

x	8	—	-4	—
y	—	2	—	0

(4 marks)



**\*\*END\*\***