

KAMPALA ARCHDIOCESE CATHOLIC PRIMARY SCHOOLS (KAPSMA)

PRIMARY SEVEN PRE – P.L.E EXAMINATION

2024

MATHEMATICS

Time Allowed: 2 hours 30 minutes

Random No.						Personal No.		

Candidate's Name:

Candidate's Signature:

District ID No.

--	--	--	--

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.
This paper has **14** printed pages.
3. Answer **all** questions. **All** the working for both sections **A** and **B** must be written in the spaces provided.
4. All working **must** be done using a **blue** or **black** ball point Pen or ink. Any work done in pencil other than on graph and Drawings will **not** be marked.
5. No calculators are allowed in the examination room.
6. Unnecessary **changes** in your work and handwriting that cannot be read easily many lead to **loss of marks**.
7. Do not fill anything in the table indicated:
'FOR EXAMINERS' USE ONLY'

FOR EXAMINERS USE ONLY		
Qn. No	MARKS	EXR'S N
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** the questions in this section.

Questions **1** to **20** carry **two marks** each.

1. **Add:** **(2 Marks)**

3 4 6									
+ 2 1 3									

2. Write "twenty thousand eighteen" in figures **(2 Marks)**

3. **Simplify:** $8p - 2m + p + 5m$ **(2 Marks)**

4. The height of mountain Rwenzori is 5.482×10^3 meters. Express the above height as a single numeral. **(2 Marks)**

5. Set $p = \{\text{Prime numbers between } 80 \text{ and } 90\}$
Find $n(p)$ **(2 Marks)**

6. The cost of $\frac{2}{3}$ kg of rice at Nakasero market is shs. **2400**. Find the cost of 4kg of rice at the same rate.

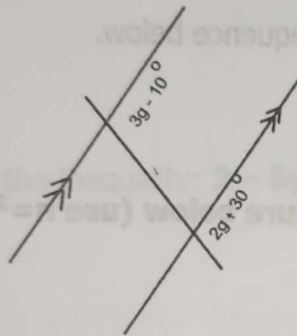
(2 Marks)

7. Express **0.1666...** as a common fraction in its lowest term.

(2 Marks)

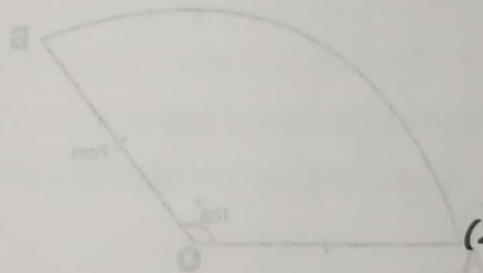
8. Find the value of **g** in the diagram below.

(2 Marks)



9. Work out: **110_{two} × 11_{two}**

(2 Marks)



10. The average age of Alex, Aminah and Joan is **17** years. If Aminah is **9** years old, Calculate the average age of Alex and Joan.

(2 Marks)

11. Express **5.2 kg** as grammes.

(2 Marks)

12. Work out **$(55 \times 1.5) + (1.5 \times 45)$** using distributive property.

(2 Marks)

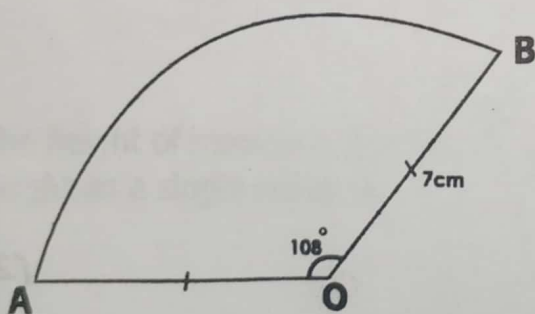
13. Find the square of the next number in the sequence below.

(2 Marks)

2, 3, 5, 7, _____

14. Calculate the length of arc AB in the figure below (use $\pi = \frac{22}{7}$)

(2 Marks)

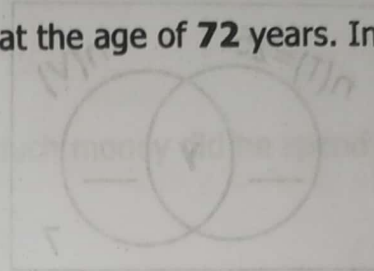


15. Find the number that was increased in the ratio **5:2** so as to get **450**.

(2 Marks)

16. Using a pair of compasses, a pencil and a ruler only, construct an angle of 105° in the space below. **(2 Marks)**

17. A man was born in **15BC** and died at the age of **72** years. In which year did he die? **(2 Marks)**



18. Solve the inequality: $2 - 5y \leq 22$. **(2 Marks)**

19. Find the value of **17** hundredths. **(2 Marks)**

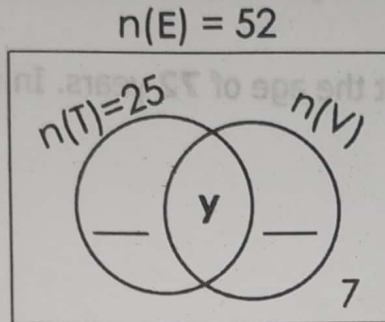
20. Draw a Venn diagram and show that all boys (B) are males (M) **(2 Marks)**

SECTION B

21. In a group of **52** boys, they all play football(F), **25** of them play Tennis (T) and football. **20** play Football and Volleyball (V) only, **(9 + y)** boys play football and tennis only, **y** boys play all the three games and **7** boys play football only.

a) Complete the Venn diagram below.

(2 Marks)



b) Find the number of boys who play only two games.

(3 Marks)

22. In a school, there are **600** girls and **720** boys, at the beginning of term three, the number of boys increased by **20%** and the number of girls reduced by **10%**.

Find the new total enrolment of the school.

(4 Marks)

23. Opio's water meter reading at the beginning of the month of June was **000480** and at the end of the month the reading was **000573**.

a) How many units of water did he use that month?

(2 Marks)

b) If each unit costs shs. 5000, how much money did he spend on water in the month of June.

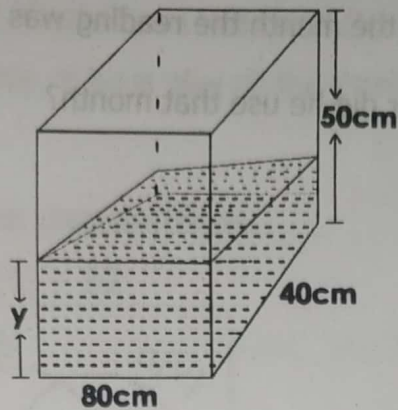
(2 Marks)

24. During the "Enkuuka" party organized by CBS Radio Buganda, each adult was requested to pay **shs. 6000** and each child was requested to pay half the price of an adult as a way of giving back to the listeners. If **shs. 162,000,000** was collected in total.

a) How many children attended the above party if **34000** people attended altogether.

(4 Marks)

25. The rectangular water tank below is holding 96 litres of water. Study it carefully and use it to answer questions that follow



- a) Find the value of y in centimeters

(3 Marks)

- b) How many litres of water are needed to fill the above water tank.

(3 Marks)

26. a) Work out:
$$\frac{4.8 \times 1.2}{0.3 \times 0.4}$$

(3 Marks)

b) Simplify: $\frac{5}{7} \div \frac{1}{2} + \frac{1}{3}$

(2 Marks)

27. Kawempe town is **1500 metres** North of Bwaise Town. Mpererewe town is on a bearing of **120°** from Kawempe Town and on a bearing of **040°** from Bwaise town.

a) Draw a sketch diagram to represent the location of the three towns.

(1 Mark)

- b) **Using a scale of 1cm to represent 300metres.** Construct an accurate diagram.

(3 Marks)

c) Find the distance in metres between Bwaise town and Mpererwe town.

(2 Marks)

28. A bus operating along kampala – masaka road carried **240** people in only **3** trips. In each trip, it carried **10** people less than the previous one.

a) Find the number of people the bus carried in the first trip.

(3 Marks)

b) If each passenger paid **shs. 2000** from Kampala to Masaka, how much money was collected in the last trip?

(2 Marks)

29. Club obligato in Kampala has a rectangular dance floor of **27** meters in length and **20 meters** in breadth. During the renovation exercise, the management used square tiles of **30cm** to cover the floor.

a) How many tiles did the management use to renovate the above floor.

(4 Marks)

b) If the cost of each tile was **shs. 2400**, how much money was spent on buying all the tiles.

(2 Marks)

30. A house maid went shopping and bought the following items.

- **2kg of rice at shs. 3600 each.**
- **1½ kg of meat at shs. 16000 per kilogram.**
- **2.5kg of sugar at shs. 4500 each kilogram.**
- **A bunch of matooke at shs. 38000**

a) Find the total expenditure if she used "boda boda" back home who charged her **shs. 4000.**

(4 Marks)

b) If she remained with **shs. 5550**, how much did she have at first.

(1 Mark)

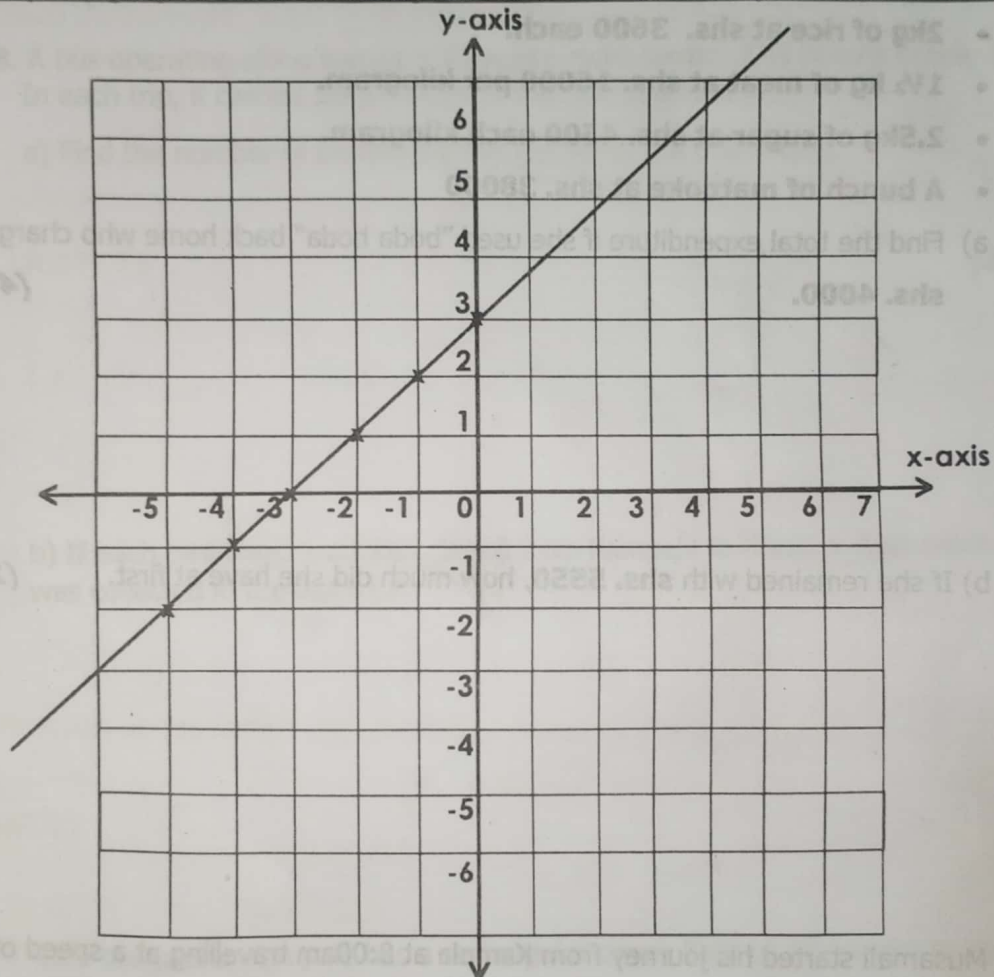
31. Musamali started his journey from Kampala at 8:00am travelling at a speed of 45km/hr and he reached Jinja at 10:00am. He rested at Jinja for half an hour so as to have breakfast and later continued to Mbale a distance of 160km driving at 80km/hr.

a) How far is Mbale from Kampala.

(3 Marks)

- b) Calculate Musamali's average speed for the whole journey. (2 Marks)

32. **Study the graph below carefully and use it to answer question that follow**



a) **Complete the table below correctly**

x	-5	-4	-3			
y	-2	-1	0			

(3 Marks)

b) **Using the above co-ordinates, state the equation of the line**

(2 Marks)