SIR APOLLO KAGGWA SCHOOLS-SINCE 1996

PLE PREP IX TERM 3 2024

PRIMARY SEVEN

MATHEMATICS

Time allowed: 2 hours 30 minutes

Index No.	EMIS No.	Personal No.

Candidate's Name: .....

Candidate's Signature: .....

District Name: .....

School Name: .....

Read the following instructions carefully:

1. The paper has **two** sections: **A** and **B**
2. Section **A** has 20 short questions (40 marks)
3. Section **B** has 12 questions (60 marks)
4. Answer **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 alteration 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 EXAMINER'S USE ONLY		
Qn. No	MARK	SIGN
1 – 10		
11 – 20		
21 – 30		
31 – 32		
TOTAL		

Turn over

SECTION A (40 Marks)

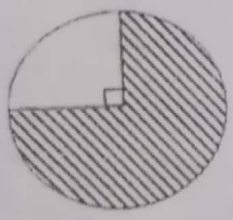
Numbers 1 to 20 carry 2 marks each

1. Work out: **37 – 22**

2. Given that set **A** = {9, 8, 7, 6, 5, 4} and set **B** = {2, 3, 4, 7, 8}
   Find **A** ∪ **B**

3. Write in words: **14,099**

4. Write down the shaded fraction of the drawing below.



5. Noel swims every **3** days and Susan every **5** days at the same swimming pool. If they used the swimming pool together today, after how many days will they use the swimming pool together again?

6. Write **904** in Roman numerals.

7. Twenty bottles of the same capacity were used to completely fill a 5-litre jerrycan with water. Calculate the capacity of each bottle in milliliters (ml).

8. Find the next number in the sequence.

0, 1, 4, 10, 20, _____

9. Nakintu borrowed **Sh. 80,000** from a bank at a simple interest rate of **15%** per year. After the loan period, she paid an interest of **Sh.24,000**. How long was the loan period?

10. Work out:

	Weeks	**Days**
	9	1
-	3	6

11. A trader bought three watches, each at **Sh.19,000**, and sold them all for **Sh.66,000**. Find the profit the trader made.

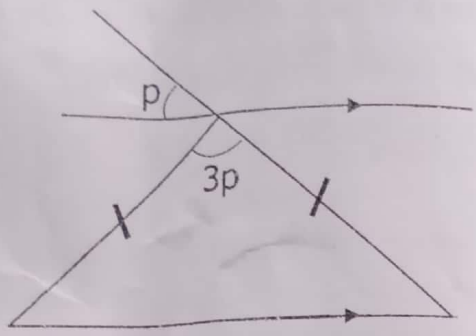
12. The mean of two numbers, **t** and **2t** is **21**. Find the value of **t**.

13. The time shown on the clock face below is in the morning. What was the time **4** hours before this time?

14. A man built a rectangular hut with a **40-metre** perimeter, placing poles at intervals of **50 cm**. How many poles did he use?

15. Work out: **3 ÷ 4 (finite 5)**

16. In the diagram below, find the value of p.



17. Sam obtained **112** points out of **160** points in a game. Express his score as a percentage.

18. Work out: $\mathbf{202 \times 25}$

19. Find the size of each interior angle of a regular hexagon.

20. Solve: $\mathbf{2(11 - x) = 2}$

SECTION B: 60 MARKS

Answer all questions in this section

Marks for each Question are indicated in the brackets.

21. (a) With the help of a ruler, sharp pencil and a pair of compasses only, construct a triangle **NOP** where line **NO = line NP**, angle **NOP= 45°** and line **OP=10 cm**.

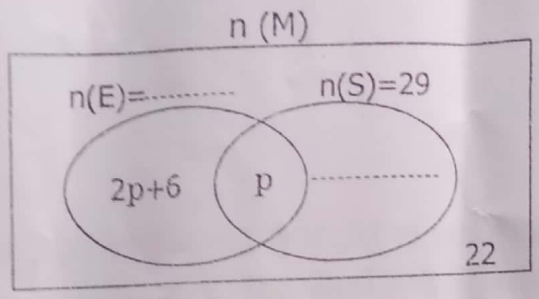
(04 marks)

(b) Measure line **NP**: _____ **(01 mark)**

22. Out of the candidates who sat for the mock examination in Matindi Primary school;

All of them passed mathematics (M)
36 passed English (E) and mathematics.
29 passed science (S) and mathematics.
22 passed only mathematics.
2p+6 passed only English and mathematics.
p candidates passed all the three subjects.

(a) Complete the Venn diagram below



(02 marks)

(b) Find the value of **p**.

(02 marks)

(c) How many candidates passed mathematics?

(02 marks)

23. The exchange rates for the Kenyan Shilling (KES) to the Ugandan Shilling (UGX) and the United States Dollar (USD) to the Ugandan Shilling are as follows;

1 Kenya shilling = 30 Uganda shillings
1 United States dollar = 3,600 Uganda shillings

(a) Convert **200** United States Dollars to Uganda shillings.

(02 marks)

(b) If the cost of a refrigerator is **16,800** Kenya Shillings, how much would this be in United States Dollars?

(03 marks)

24. (a) Work out: $2\frac{1}{7} \times 1\frac{1}{6}$

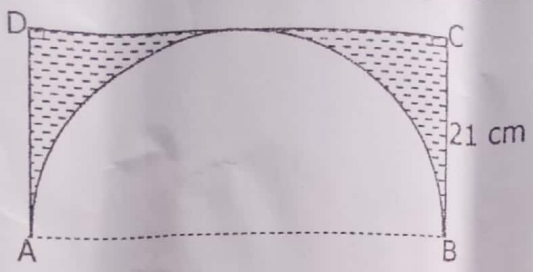
(02 marks)

(b) Simplify: $\frac{9.1}{7} + \frac{1.8}{2}$

(03 marks)

25. The figure **ABCD** below is a rectangle in which line **BC = 21 cm** and the unshaded part is a semicircle.

Calculate the area of the shaded part. **(Use $\pi=\frac{22}{7}$)**



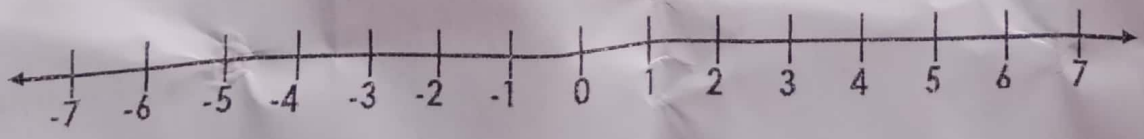
(05 marks)

26. (a) Arrange the following numbers beginning with the smallest.

2, $^{-}$4, 0, $^{-}$1, 5

(01 marks)

(b) Show the operation **$^{+}$3 + $^{-}$9 + 11** on the number line below.



(03 marks)

27. A night train, traveling at an average speed of 66 km/h, left station **T** for station **S** via station **R** at 7:00 pm. It reached station **R** after **3** hours, stopped for **30** minutes, then continued the remaining **132 km** to station **S**.
(a) What time did the train arrive at station **S**, using the 24-hour clock system?

(04 marks)

(b) Calculate the total distance traveled from station **T** to station **S**.

(02 marks)

28. Emoi, Wakadaala and Golomba contributed **Sh.72,000** in the ratio **2 : 3 : *y*** respectively, to pay for Namalebe's hospital bill. Emoi contributed Sh.12,000.

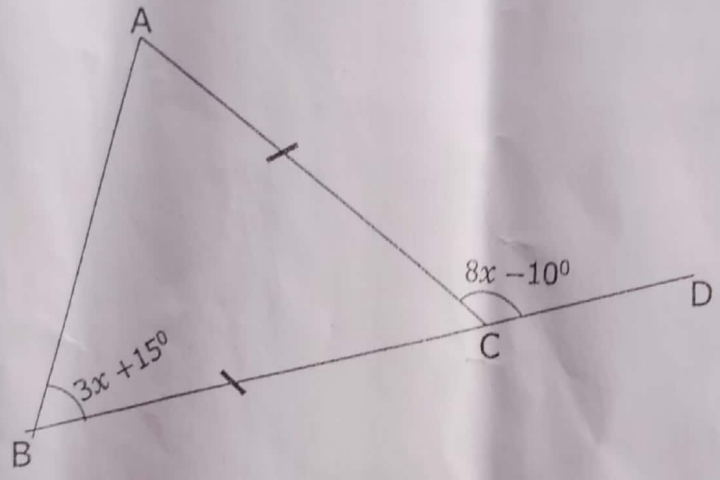
(a) How much did Golomba contribute?

(04 marks)

(b) Find the value of **y**.

(02 marks)

29. Study the diagram below carefully and use the information provided to answer the questions that follow.



(a) Find the value of x in degrees.

(03 marks)

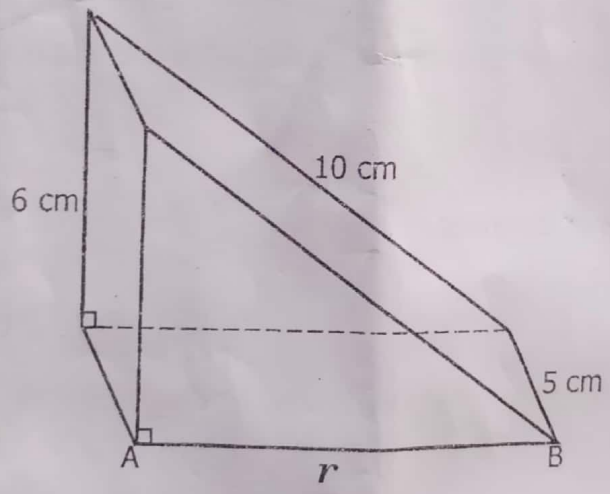
(b) Calculate the size of angle **ACD**.

(02 marks)

30. Joseph is **4** years older than Mary, and Mary's age is two thirds that of Peter's. The total age of Joseph, Mary and Peter is **39** years. How old is Peter?

(04 marks)

31. A cake box was made in the shape of a triangular prism, as shown in the diagram below. Study the diagram and use it to answer questions (a) and (b) that follow.



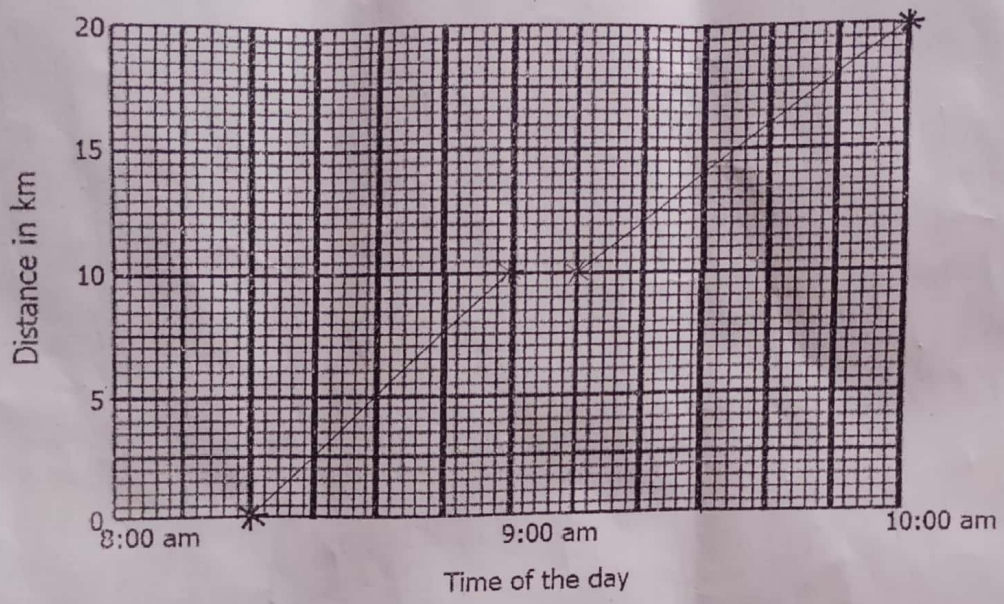
(a) Find the length of **AB** marked r in cm.

(02 marks)

(b) Calculate the volume of the box.

(02 marks)

32. Ekichu left his home riding his motorcycle to go to the farm. On his way, he stopped to fuel the motorcycle. Study the graph showing Ekichu's journey and use the information provided to answer the questions that follow;



(a) At what time did Ekichu leave home?

(01 mark)

(b) How long did Ekichu take to fuel his motorcycle?

(01 mark)

(c) Calculate Ekichu's average speed over the whole journey. **(03marks)**

THE END