SIR APOLLO KAGGWA SCHOOLS SINCE 1996
PLE PREP TEST IX TERM 3 2023
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: 20 QUESTIONS 40 MARKS

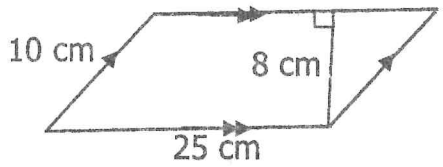
Numbers 1 to 20 carry 2 marks each

1. Work out: **4.2** + **1.3**

2. Given that: set **A** = {all the factors of 8} and
   set **B** = {all even numbers between 0 and 10}
   Find **A∩B**.

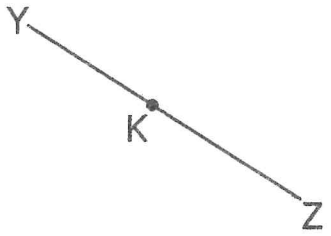
3. Write **20,023** in words

4. Find the area of the figure below



5. Find the lowest common multiple of **8** and **12**.

6. Using a ruler, sharp pencil and a pair of compasses only construct a line through point **K**, perpendicular to **YZ** below.



7. Work out: $\sqrt{\frac{36}{144}}$

8. In a class of **60** pupils, **36** are girls. Find the ratio of boys to girls.

9. A meeting that lasted $3\frac{1}{3}$hrs ended at **1:50** pm at what time did it begin?

10. Express $\mathbf{19}_{\mathbf{ten}}$ to binary base.

11. Solve: $\mathbf{a} + \mathbf{5} \leq \mathbf{3}$

12. Work out: $\mathbf{1}\frac{1}{4} + \frac{2}{3}$

13. The interior angle of a regular polygon is twice its exterior angle. Find the number of sides of the polygon.

14. Given that $y = 2x - 1$, complete the table below

x	1	2	_____
y	_____	3	9

15. Set **V** has **63** proper subsets. Find **n(V)**

16. Subtract **d−2y** from **3y − 5d**

17. A string measures **7.5** metres long. How many pieces each measuring **30** cm long can be cut from the string?

18. Work out: $^{-}9 - {}^{+}9$

19. Divide **2583** by **63.**

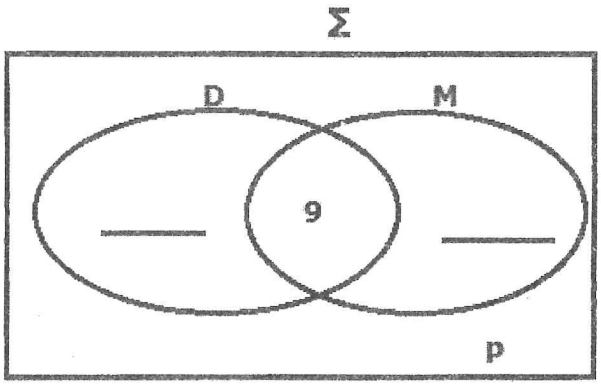
20. Kawa deposited **5,000** shilling notes numbered consecutively from **CS**3056136 to **CS**3056185 in a bank. How much money did Kawa deposit?

SECTION B: 12 QUESTIONS 60 MARKS

Marks for each number are indicated in the brackets

21. In a class, **(3p+2)** pupils like debate **(D)** only, **(p+5)** like music **(M)** but not debate, **9** like both while **p** pupils do not like the mentioned activities.

a) Complete the Venn diagram below using the information above.



b) If 36 pupils like either debate or music, find the value of **p**. (02marks)

c) Find the probability that a pupil likes only music.

(01 mark)

22. (a) Find the number which has been expanded below. (02marks)

$$(4\times10^4) + (7\times10^3) + (5\times10^0)$$

(b) Round off **99,641** to the nearest thousands. (01 mark)

(c) Write **CIX** in Hindu Arabic numerals. (01 mark)

23. Grace bought the following items from one seller

$\frac{1}{2}$ kg of sugar at Sh. 3,000 per kg

6 passion fruits at Sh.1,000 for 3 passion fruits

8 oranges at Sh.5,000

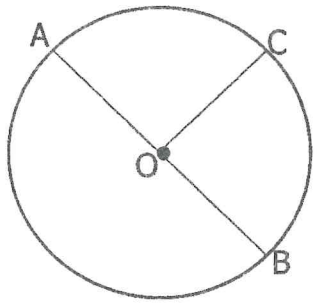
If Grace was offered a discount of **20%** on his total expenditure;

(a) How much was the discount?

(04 marks)

(b) How much did Grace pay for one orange after the discount? (02marks)

24. The diagram below represents a wheel of a wheelbarrow where O is the centre. Line **OC = 14cm** and line **AB = (t + 16)** cm.



(a) Find the value of **t.**

(02 marks)

(b) Find the number of revolutions the wheel makes to cover a distance of 1.32 km. (use π as $\frac{22}{7}$) (03marks)

25. Nabukwasi is **5** years old and her father is **23** years old.

(a) In how many years will the father be three times as old as Nabukwasi (03marks)

(b) How old will the father be then?

(01 mark)

26. (a) Express **0.8333.....** to a common fraction in the simplest form.

(02 marks)

(b) Work out: $4\frac{1}{2} \div 1\frac{1}{4} \; X \; 2\frac{2}{3}$

(03 arks)

27. The table below shows the performance of pupils of a certain school in PLE examination.

Number of pupils	15	25	20
Division	Div.1	Div.2	Div.3

Draw an accurate pie chart of radius **4** cm to represent the above information.

(05marks)

28. Hajjati moved from town **A** town **C** via town **B**. she started her journey at **8:00am** and moved at **80km/hr** for **$1\frac{1}{2}$hours** to town **B.** she rested for **30** minutes and then continued at **70km/hr** and reached town **C** at **12:00** noon.

(a) How far is town **A** from town **C**?

(04marks)

(b) Calculate her average speed for the whole journey.

(02marks)

29. In a P.7 class, **30** pupils passed in division one, **36** passed in division two and the remaining **12%** passed in division three.

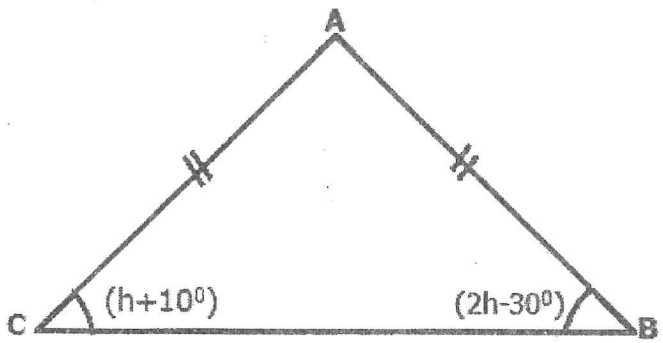
i) Find the number of pupils in the class.

(03 marks)

ii) Find the percentage of pupils who passed in division one.

(1 mark)

30. In the diagram below, line **AD** is parallel to line **BC** and line **AC** = line **AB**. Study the diagram and use it to answer the questions (a) and (b) that follow;



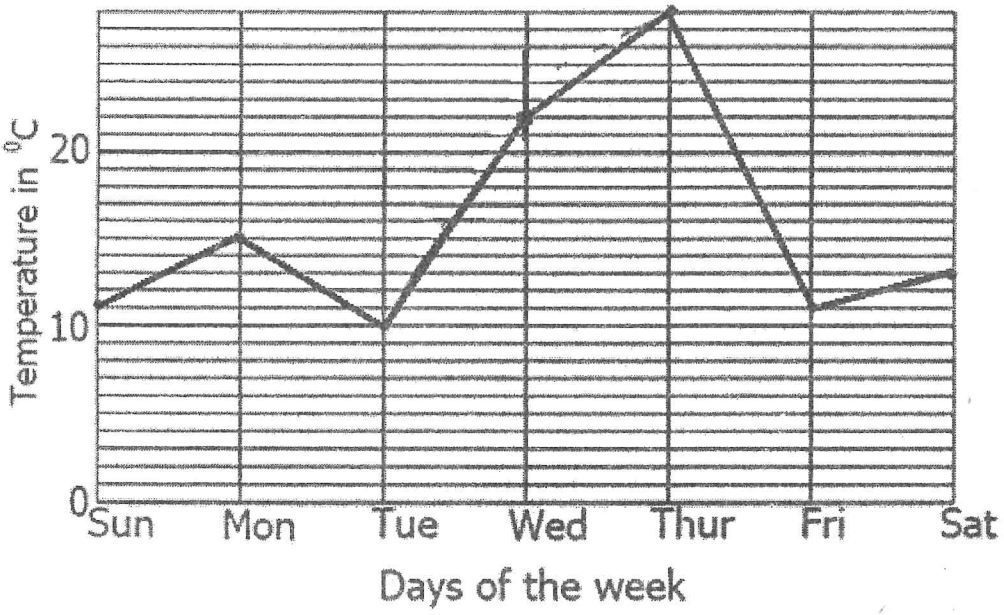
(a) Find the value of **h**.

(02 marks)

(b) Find the size of angle **BAC.**

(03 marks)

31. The graph below shows the temperature of a certain place for a week.



(i) What was the temperature recorded on Tuesday?

(01 mark)

(ii) Find the modal temperature recorded.

(01 mark)

(iii) Calculate the range in temperature.

(02 marks)

(iv) What was the average temperature recorded in the week.

(02 marks)

32.(a) With the help of a ruler, sharp pencil and a pair of compasses only, construct a rhombus **ABCD** in which line **AB = 6 cm** and diagonal **AC = 10 cm**

(04 marks)

(b) Measure angle **ABC** =_____

(01 mark)

THE END