PARAGON EXAMINATION BOARD (PEB)

PRIMARY SEVEN QUALITY CHECK ONE 2023

P.7 MATHEMATICS

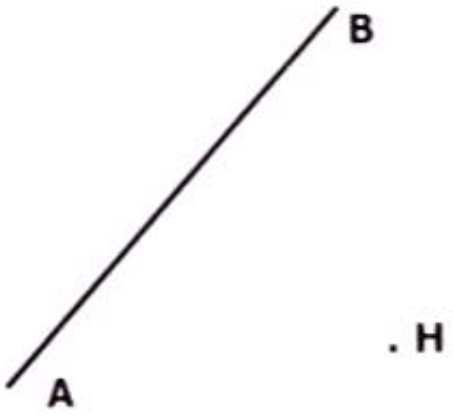
TIME 2HOURS 30MINUTES

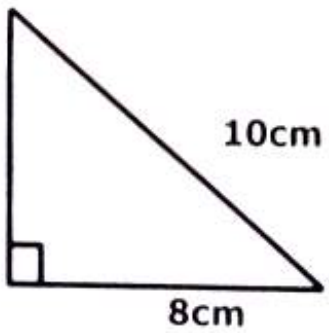
NAME: .....

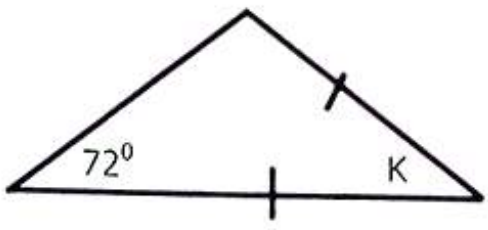
SECTION A

1.	Workout **2424 ÷ 6** using lattice method.
2.	Find the range of the next two numbers in the progression below. **48, 46, 43, 38, 31,** _____, _____.
3.	Write **one hundred four thousand one hundred one** in standard form.
4.	Given that **a=3, b= −4** and **c=5**. Find the value of $\mathbf{b}^2$

5.	Round off **5789** to the nearest hundreds.
6.	Write the **GCF** of **12** and **18** in Roman numerals.
7.	Simplify **-3- ¯ 8**
8.	Increase **960 kg** in the ratio of **8:9**
9.	Solve $\frac{16-k}{4} = 1 - k$

10.	If  represents **12 balls**. Draw such pictures to represent **66 balls**.
11.	Workout **(17÷5) + (13 ÷5)** using distributive property.
12.	Using a ruler, a pencil and a pair of compasses only, construct a parallel line to line **AB** through point **H.** 

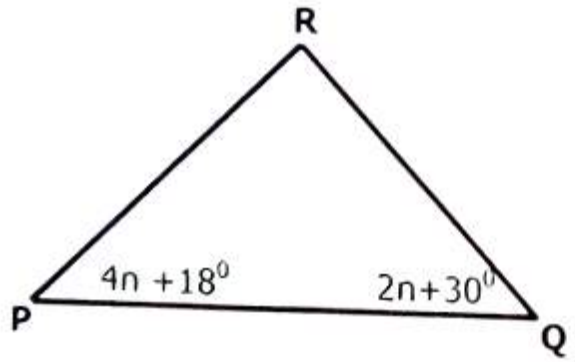
13.	Convert **8500g** of sugar to kilograms.
14.	A trader sold a dress at sh. **63,000** and made a loss of sh.**700**. Calculate the percentage loss the trader made.
15.	Study the figure below and use it to find its area. 

16.	Give that $52_P = 200_{four}$, find the value of **P**.
17.	Give that set **Q= {f, h, m}**. How many powers sets are in set **Q**
18.	Work out $3\frac{1}{4} + \frac{4}{5}$
19.	Find the size of the angle marked **K**. 

20. Work out **3 - 5=y (finite 6)**

SECTION B

21. In the trigon below, angle **QPR=50**



(a). Workout the size of angle **PRQ**. ***(4 marks)***

22. Ssekuburya went to a supermarket and bought the items below.

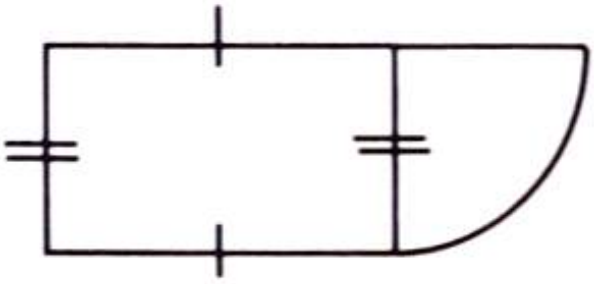
$1\frac{1}{2}$ kg of rice at sh. **1,800** a packet of **300g**.

750ml of edible oil at sh. **8,000** a litre.

2 half kilogram sachets of salt.

If Ssekuburya went to the supermarket with sh. **20,000** and remained with sh. **4820** after being offered a discount of 8%. How much did he pay for a sachet of salt? ***(5 marks)***

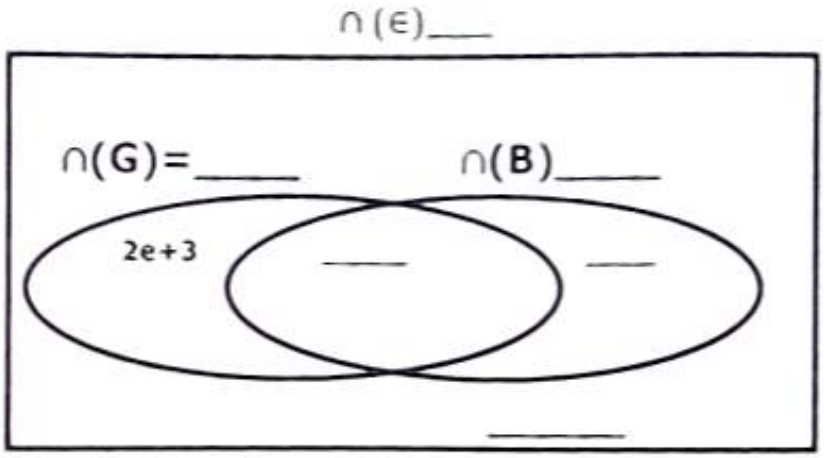
23. A fly moves $\mathbf{1\frac{1}{2}}$ times around the figure below to cover **1.34** metres.



20cm

Calculate the area of the figure above ***(06 marks)***

24.	In a group where all the members grow maize **(M)**, **(5e-2)** of them grow beans **((B)**, **(2e+3)** grow groundnuts **(G)** but not beans, **(e+4)** grow all the three crops, **(e-4)** grow only one crop. Give that **3 less** farmers grow groundnuts than beans.
(a)	Complete the Venn diagram below using the above information ***(3marks)***

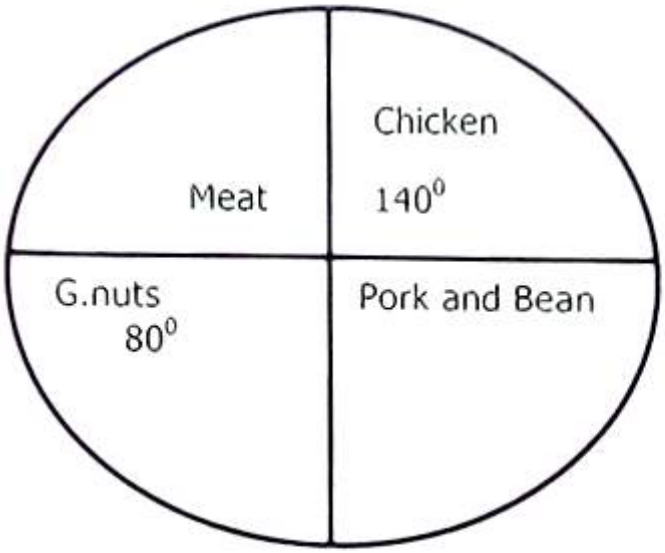


(b)	What is the probability that the group leader grows at least two crops? ***(3 marks)***

25	**A YY** coaches bus left **Kampala** with **60** passengers, heading to **Mbale** via **Jinja**. The bus fare to **Jinja** and **Mbale** was sh. **8.000** and sh. **20000** respectively. If some passengers alighted from **Jinja** and the rest headed to **Mbale**.
(a).	Calculate the number of passengers who reached Mbale if the conductor collected a total of **sh.912, 000** from all the passengers. ***(3 marks)***
(b)	How much money did he collect from the passengers who stopped in **Jinja**? ***(3 marks)***

26. The ratio of boys to girls in a class is **1:2** respectively, 40% of the boys are in the lower primary classes and **75%** of the girls are in upper primary classes. The total number of pupils in upper primary classes is **42,** how many pupils are in lower primary classes? ***(5marks)***

27. The circle graph below shows how Mr. Kagodo spent his monthly salary of sh.486,000.



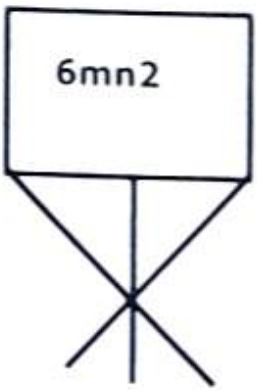
(a) Find the angle sector for pork and Beans if he spent sh. **54000** on buying meat ***(2 marks)***

(b). If he spent sh. **98500** on buying pork, how much money was spent on Beans ***(3 marks)***

28.	Shamran shared a monthly allowance among her daughters Rachael, Sarah and Annet in the ratio of **2:4 3** respectively. If Sarah and Annet got sh. **400,000** more than Rachael, how much money did Sarah get than Annet? ***(5 marks)***
29.	Using a ruler, a pencil and a pair of compasses, construct a trilateral **ABC** where **AB=6cm**, angle **ABC=120^0** and **BC=5cm**. Drop a perpendicular bisector from **C** to meet **AB** at **P** ***(4 Marks)***
(b)	Measure angle **ACB (1 mark)**

30.	Solve $\frac{3k+1}{2} - \frac{2k+5}{3} = 1$ *(2 marks)*
(b)	Solve and graph the solution set for **$-7m > -2(m+15)$** *(2marks)*
32.	Michael constructed a circular hut in the middle of his square garden of perimeter **176m** which is **8m** away from the boundary. If the distance between the poles was 4metres, how much money was charged to buy the poles if each pole costs sh. **1000**? *(4marks)*

32. A teacher wrote a number on the board as shown below and some of its digits were unknowns. Use it to answer the questions that follow.



(a) If $\frac{3}{8}$ of the value of m is 150, what is the digit represented by letter n given that the ratio of the values of the digits m and n is **8:1** respectively ***(4 marks)***