KAMPALA CAPITAL CITY AUTHORITY

DIRECTORATE OF EDUCATION AND SOCIAL SERVICES

PRIMARY SEVEN MOCK EXAMINATIONS 2022

MATHEMATICS

TIME ALLOWED: 2 HOURS 30 MINUTES

INDEX NO:	***EMIS No.***						***Personal No.***		

CANDIDATE'S NAME: .....

CANDIDATE'S SIGNATURE: .....

EMIS No: .....

DIVISION NAME: .....

Read the following instructions carefully.

1. This paper is made up of two sections: **A** and **B**
2. Section **A** has **20** questions (**40** marks)
3. Section **B** has **12** questions (**60** marks)
4. Answer ALL questions in both sections **A** and **B**
5. ALL answers **MUST** be written in Blue or Black Ball - point pen or ink
6. Un-necessary changes in your work may lead to loss of marks.
7. All diagrams **MUST** be drawn in pencils.
8. Any handwriting that cannot be easily read may lead to loss of marks.
9. Do **not** fill any thing in the boxes shown ***"For Examiner's use only".***

FOR EXAMINERS' USE ONLY

QN. NO.	*MARKS*	*SIGN*
1 - 10		
11 - 20		
21 – 25		
26 - 30		
31 - 32		
TOTAL		

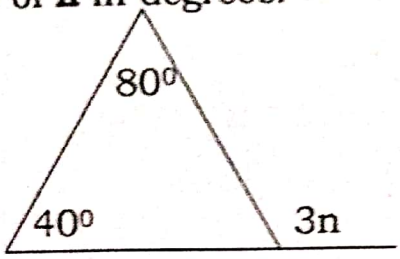
TURN OVER

SECTION A

1. **Workout:** 12 x 3

2. **Subtract:**
$$\begin{array}{r} 2\ 0\ 3_{\text{five}} \\ -\ 1\ 4_{\text{five}} \\ \hline \\ \hline \end{array}$$

3. In the triangle below, find the value of **n** in degrees.



4. Given that **n = 3** and **m = -2**, evaluate $\frac{\mathbf{2n + m}}{\mathbf{n}}$

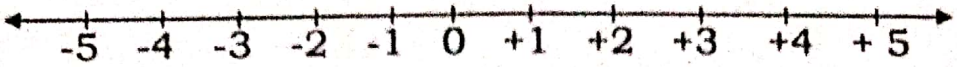
5. If a dice is tossed once, what is the chance of picking a square number?

6. What number has been expanded to give;
$(7x10^{3})+(6x10^{1})+(8x10^{-1})+(4x10^{-2})$

7. Mary had **20** litres of liquid soap. She gave each child ½ litre. How many children did she give?

8. Find the median of the numbers.
8, 10, 4, 1, 6 and **9**

9. Workout using the number line below. $^{-}3 - {}^{+}5$



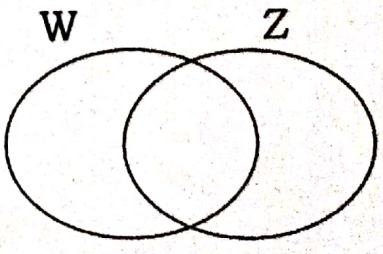
10. Using a ruler, a pencil and a pair of compasses only, construct an angle of $\mathbf{75^0}$ in the space provided below.

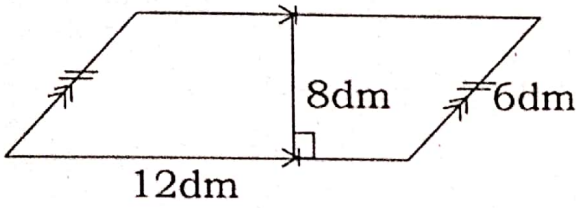
11. At DFCU Bank, One US Dollar costs **Ug. Sh 3,600**. How much money in Uganda Shillings would one get from **1050 US Dollars**.

12. Write **147** in Roman numerals.

13. Peter got **2½%** in a Maths contest. What fraction of the work did Peter get?

14. In the Venn diagram below; Shade $\mathbf{Z^1}$.

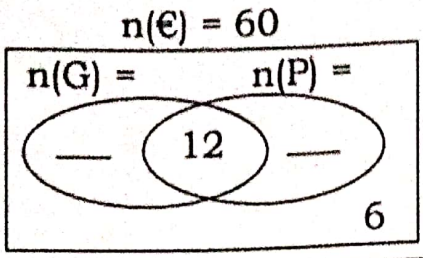


15.	What angle is a complement of $(2x + 30)^0$?	16.	Solve the equation: $\frac{1}{2}p + 1 = 3$
17.	Find the area of the Parallelogram below.  	18.	**Add:** Hrs Min 3 45 + 1 50 _____ _____
19.	A pupil has $\frac{2}{3}$ of an orange. If she gave ¼ of it to her friend. What fraction of the orange did she remain with?	20.	The two base angles of an isosceles triangle are: $(2x + 50)^0$ and $(4x+20)^0$. Find the value of x

SECTION B

21. In a birthday party, **60** students were invited, **42** were served with popcorns (**P**), **r** were served with groundnuts (**G**), **6** did not take any and **12** were served with both eats.

a. Represent the above information in the Venn diagram below. *(2marks)*



b. How many students like ground nuts?

(2marks)

c. Find the number of students who were served with one type of eats.

(2marks)

c. Find the number of students who were served with one type of eats.

(1mark)

22. **Complete the shopping bill table below.** *(6marks)*

ITEM	UNIT PRICE	QUANTITY	AMOUNT
Bread	sh. 3,500 per loaf	2 loaves	sh. .....
Meat	sh. 10,000 per kg	..... kg	sh. 5,000
Rice	sh. ..... per kg	1½ kg	sh. 6,000
Sugar	sh. 3,000 per kg	1.5kg	sh. .....
Milk	sh. 1200 per litre	2½ litres	sh. 3,000
Total expenditure			sh. .....

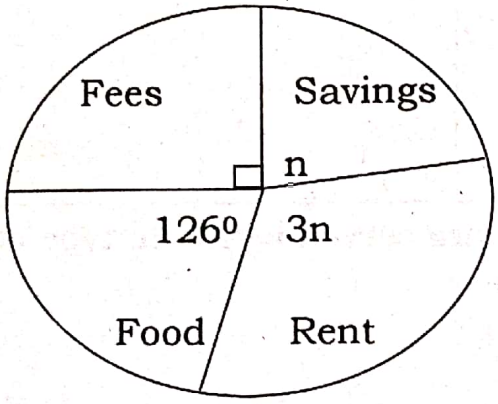
23. Write **CDXLIX** in Hindu Arabic numerals.

(2marks)

b. Find the sum of the place value of **4** and the value of **6** in the number: **435.16**

(3marks)

24. The pie chart below shows how Mrs. Opio spends her monthly income. If she saves **sh. 120,000**, how much money does she earn per month?



(5marks)

25. a. **Simplify:** $\frac{0.12 \times 5.4}{0.03 \times 0.6}$

(4marks)

b. Express **0.5454 ...** as a common fraction.

(2marks)

26. A bus left Kampala bus park at **8:30am** and reached Soroti at **1:00pm** a distance of **270km** apart.

a. How long did the bus take to reach Soroti ?

(2marks)

b. Calculate the speed of the bus in km/hr.

(3marks)

27. a. Write **955** in Roman numerals.

(2marks)

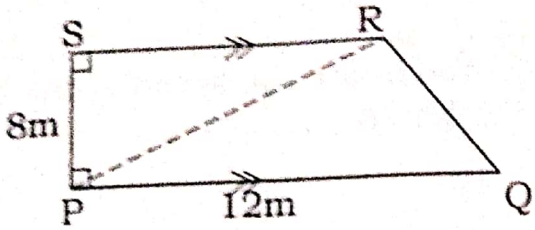
b. Nashed has **496** goats on the farm. Round off the number of her goats to the nearest tens.

(1mark)

c. **Workout:** 3 – 4 = p *(mode 5)*

(2marks)

28. The area of the figure below is **72m²**.



a. Find the length of **$\overline{SR}$**. *(3marks)*

b. Workout the area of the triangle **RSP**. *(2marks)*

29. a. Using a pencil, a ruler and a pair of compasses only, construct a kite **ABCD** where diagonal **AC = 11cm**, **BD = 6cm** and line **AB = AD = 4.5cm**. *(5marks)*

Measure length **BC** in cm. *(1mark)*

A man deposited **sh. 120,000** in a bank which gives 5% interest rate per month for four months.
Calculate the simple interest. *(3marks)*

How much money will he have at the end of the period? *(3marks)*

31. Solve for **m**:

a. $2(2m + 4) - 2(m - 2) = 6$ *(3marks)*

b. Nakiku is three times as old as her son Kiku. In **5** years time, their total age will be **46** years.
How old will Nakiku be in **8 years** time? *(3marks)*

32. a. **Simplify:** $n^2 \times n$ *(1mark)*

b. $m^6 \div m^2$ *(2marks)*

c. $\frac{a^2 \times a^5}{a^3}$ *(2marks)*

END