THE PRIME EXAMINATIONS 2023

PRIMARY SEVEN END OF TERM II

MATHEMATICS

Time allowed 2 hours 30 minutes

INDEX NO: **Random No.** **Personal No.**

Candidate's Name:...... Trs Copy ....

Candidate's Signature:..

School; ....

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. The paper has **9 printed pages.**

3. Answer **all** questions. All the working for both sections A and B must be shown 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 graphs and diagrams will not be marked.

5. No calculators are allowed in the examination room.

6. Unnecessary changes in your work and handwriting that is not easily read may lead to loss of marks

7. Do not do anything in the table indicated "For Examiners' use only", and those boxes inside the question paper.

FOR EXAMINERS' USE ONLY

QUESTION NUMBER	MARKS ATTAINED	INITIALS
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

APPROVED:
Consultant
Mathematics Department (PEC)
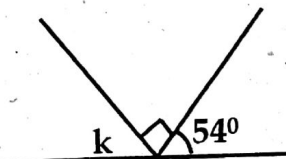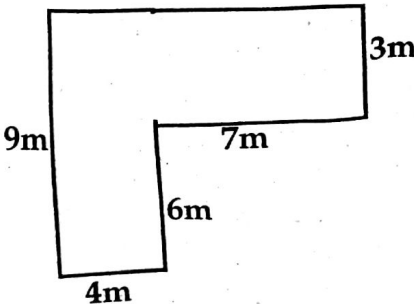
Turn over

Section A (40 Marks)

1	Work out: $\frac{4}{7} + \frac{2}{7}$	2	Simplify: $p + 3p + p$
3	Round off 93.74 to the nearest whole number.	4	Write in figures: Thirty five thousand twenty four.

5. Find the size of angle marked k in the diagram below.

6	Work out: -7 - -10	7	Find the next number in the sequence: 37, 46, 62, 87, 123, _____

8. Find the perimeter of the figure below.

|		
9	Change 200 grammes to kg.	Change 112_{four} to base five.
11	Give that A = {0,1,2,3,4,5,6} and set B =	5,7,11}. Find n(B - A)
12	Using a ruler and a pair of compasses , construct an angle of 45^0 in the space below.	
13	The bus fare from Kampala to Mbale was increased by 20%. If the new bus fare is sh.24000, find the old bus fare.	Given that set Q has 15 proper subsets, find the number of elements in set Q.
15	Find the size of angle X in the isosceles triangle below. 115⁰	angle below.
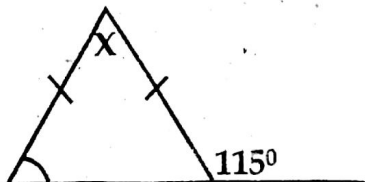
16. Amos slept at 10:30pm and work up at 4:20am. For how long did Amos sleep?

17. Given that a = -4, b = 3 and c = 2. Find the value of $\dfrac{c - a}{b}$

18. The tank below contains 40 litres of milk when full. If its sold using 500ml cup, find the number of cups that can be obtained from tank.
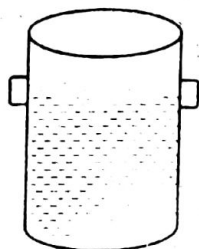
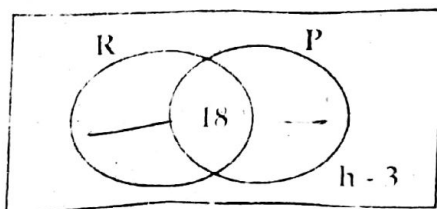19. If 3 Maths text books cost sh.72000. How much will 4 books of the same type cost?

20. A pupil scored the following marks in Mathematics tests; 36, 54, 42, 63, 31 Find the median mark.

Section B (60 Marks)

21. In a class of 60 pupils, 33 like posho(P), 5h like rice (R) 18 like both rice and posho while h-3 do not like any of the two types of food.

(a) Complete the Venn diagram below.   (02 marks)

(b) Find the value of h.   (03 marks)

22   (a) Write as a single number: $(9 \times 10^3) + (4 \times 10^1) + (7 \times 10^{-2})$ (02 marks)

(b) Find the product of the value of 8 and the place value of 3 in the number 2816.53.   (03 marks)

23   The exchange rate for Kenya shillings(Ksh) to Uganda shillings (Ush) and the United States Dollars (US$) to Uganda shillings are shown below.
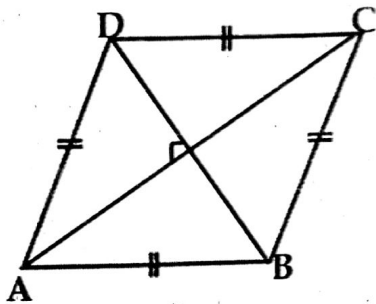Ksh1 – Ush.29
US$1= Ush.3600
(a) Convert Ush.914950 to Kenyan shillings.   (02 marks)

(b) If a sumsung phone costs US$580, find the equivalent cost of the same phone in Kenyan shillings.   (03 marks)

24	The diagram below shows a rhombus ABCD where diagonals AC=16cm and BD= 12cm

(a) Calculate the area of the rhombus.   (02 marks)

(b) Find the perimeter of the rhombus.   (03 marks)

25	The table below shows marks obtained by P.7 pupils of Lumino P/S.

Marks (%)	54	40	30	60	58
No. of pupils	2	5	7	4	2

(a) Find the total number of pupils who did the test.   (02 marks)

(b) Work out the mean mark of pupils who scored above 50 marks.   (03 marks)

26   Town X is 60km on a bearing of 120⁰ from town Y and town Z is 70km on a bearing of 040⁰ from town X.

(a) Draw a sketch diagram to show the positions of the towns.   (01 mark)

(b) Using a scale of 1cm to represent 10km, draw an accurate diagram.

(03 marks)

(c) Find the distance in km between town Y and town Z.   (01 mark)

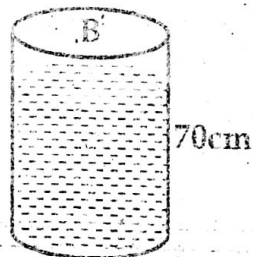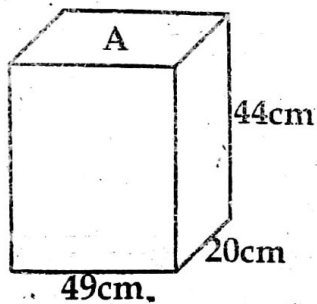**27** (a) Work out: $\dfrac{4.6 + 3.4}{0.2 \times 0.08}$ (03 marks)

(b) $4\dfrac{3}{4} \div 2\dfrac{1}{4} \times 1\dfrac{1}{2}$ (02 marks)

28 Peter filled container A with water, he then poured it into container B as shown below.

(a) Calculate the capacity of container A. (02 marks)

(b) Find the radius of container B if it has the same volume as container A. (03 marks)

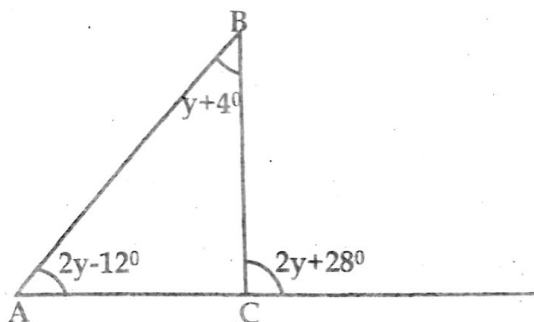29 (a) Solve: $21 - x > \frac{2x}{5} - 7$ (03 marks)

(b) Paul is 14 years older than Harriet now. Thirteen (13) years ago their total age was 60 years. How old is Harriet now?   (02 marks)

30 (a) Work out: $3 - 6 =$ (finite 7)   (02 marks)

(b) If today is Friday, what day of the week will it be 40 days after?   (03 marks)

31 Study the triangle below and answer the questions that follow.

(a) Find the value of y. (03 marks)

(b) Find the size of angle ACB. (02 marks)

32 Kigo left town P at 10:00am and drove at 60km/hr for $1\frac{1}{2}$ hours. He then changed the speed and drove at 70km/hr for 1 hour to town Q. He rested for 30 minutes at Q. He then drove back to town P from town Q at a steady speed of 80km/hr.

(a) At what time did he arrive at town Q? (01 mark)

(b) Work out Kigo's average speed for the whole journey. (04 marks)