BROAD EXAMINATIONS®

P.7 MATHEMATICS EXAMINATION

PRE – PLE TRIAL SET III 2023

Time allowed: 2 hours 30 minutes.

Random No.						Personal No.		

Candidate's Name:.....

Candidate's Sign ture.....

District 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 the space provided in blue or black ball point pens and ink. **Only diagrams should be done in pencil.**
6. Unnecessary crossing of answers will lead to loss of marks.
7. Any handwriting, which cannot be easily read, may lead to loss of marks.
8. Do **not** fill anything in the boxes indicated for Examiners' use only.

FOR EXAMINERS' USE ONLY		
PAGES	MARKS	SIGN
Page 2		
Page 3		
Page 4		
Page 5		
Page 6		
Page 7		
Page 8		
TOTAL		

Teacher's comment to the learner

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Approved by:

Team Head Mathematics Department

PLE REVISION TIPS

In groups share these concepts from P.6 Term I work;

*** Listing and finding subsets *Complement of sets *Divisibility tests**

*** Types of numbers *Application of median in and range on types of numbers**

***Difference between listed elements and number of elements in a Venn diagram.**

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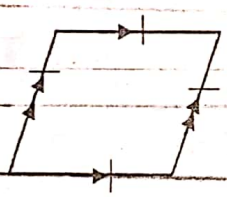
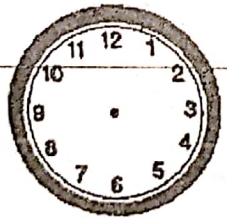
SECTION .A. (40 Marks)

1.	Add 57 to 23.	2.	List all multiples of 4 less than 20.
3.	What is $\frac{8}{9}$ of 18 cows?	4.	Set Y = {0,1,2,3,4,5} Set X = {5,7,0,2,3,4,5} Find X∪Y.
5.	Simplify: $^{-}3 - {}^{+}4$	6.	Write in figures; Three hundred fourteen thousand forty nine.
7.	How many lines of folding symmetry has the figure below? 	8.	Work out: $5^4 \div 5^2$
9.	An examination that started at 8:30am took 2¼ hours. Show the time it ended on the clock face below. 	10.	Divide: $16\overline{)3680}$
11.	Paul exchanged 150 US dollars for Ug sh. 540,000. What was the exchange rate?	12.	Given that 3:5 = n:25, find the value of n.

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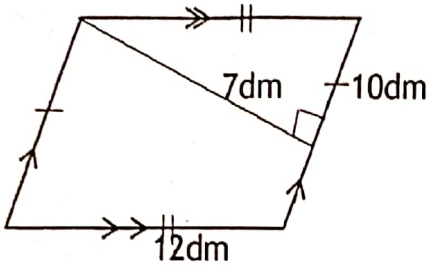
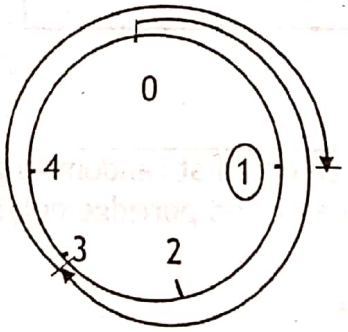
13.	Find the area of the figure below;  	14.	Using a ruler, a pencil and a pair of compasses only, construct an angle of 105^0.
15.	The average mass of 16 boxes is 50g. What is their total mass?	16.	Multiply: $101_{two} \times 11_{two}$
17.	Shilling notes in a bundle are numbered consecutively from AP 7300583 to AP7300610. How many notes are in the bundle?	18.	What mathematical finite statement is shown on the dial below? 

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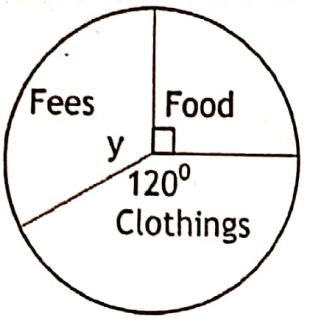
19. The pie -chart below shows the expenditure of 120 dollars by a woman.



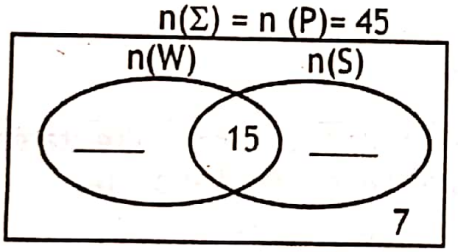
How many dollars were spent on fees?

20. A motorcyclist covered a distance in 2½ hours at a speed of 30km/hr. What distance did he cover?

SECTION .B. (60 Marks)

21. At a party attended by 45 guests, all guests took porridge (P), 30 guests took porridge and water (W), d guests took soda (S) and porridge while 7 guests took porridge only and 15 guests took all the three drinks.

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



(b) Find the value of d.

(c) If a guest is selected at random to give a speech, what is the probability that the guest took water and porridge only?

(05 marks)

22. (a) Expand 9403 using powers.

(b) What number is expanded to give; $(7x10^3)+ (5x10^1) + (9x10^{-2})$?

(05 marks)

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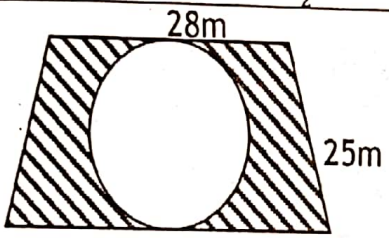
23. (a) Find the next two equivalent numbers in finite 6.

4(finite 6) = 4,10, 16, _____ ,_____

(b) What is the number when divided by 7 leaves 5 as a remainder and when divided by 10 leaves 2 as a remainder?

(05 marks)

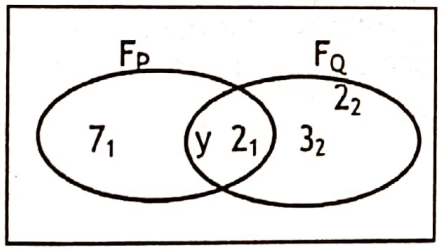
24. The figure below is an isosceles trapezium with a circle enclosed inside. Given that the area of the circle is $38\frac{1}{2}cm^2$. Use it to answer the question that follows.



Calculate the area of the shaded region.

(04 Marks)

25. Study the Venn diagram below and answer questions that follow.



Given that the LCM of P and Q is 420;

(a) Find the value of y.

(b) Work out their GCF.

(04 Marks)

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26. In a school, $\frac{3}{5}$ are girls and the rest are boys. Given that $\frac{3}{4}$ of the girls have school uniform, $\frac{1}{8}$ of the boys do not have school uniform and 210 boys have school uniform.

(a) How many pupils are in the school?

(b) How many pupils altogether do not have school uniform?

(06 Marks)

27. A parent has two children; Joy and Heleb. Heleb is $\frac{1}{3}$ his father's age while Joy is four years younger than Heleb. The total age of the two children is ½ of the father's age.

(a) How old is the father?

(b) Find the age of each child.

(05 Marks)

28. The mean mark of 5 scores is 36 and that of 7 other scores is 60.

(a) Find the total mark of all the 12 scores.

(b) What will be the average score if a score of 63 is included?

(05 Marks)

29. The table below shows the buying and selling of some currencies in Uganda shillings.

CURRENCY	BUYING	SELLING
1 US Dollar	Ugsh.3550	Ugsh.3600
1 Kenya Shilling	Ugsh.25	Ugsh.28
1 Rwanda Franc	Ugsh.4	Ugsh.5

(a) How many Us dollars will Peter get for Ugsh.180,000?

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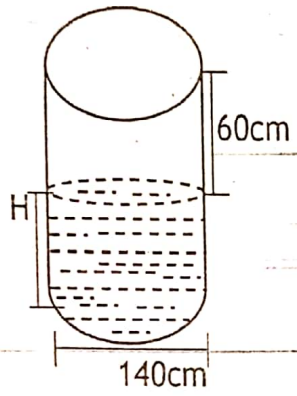
(b) A coat in Kenya costs Ksh. 6000. Find the price of the coat in Rwanda Francs.

(05 Marks)

30. The cylindrical tank below contains some water. Study and use it to answer questions that follow.



(a) How much water is needed to fill the tank? ($\pi = \frac{22}{7}$)

(b) If the tank is $\frac{5}{11}$ full, find the height of the water in the tank.

(05 Marks)

31. A school is 600 metres from a mosque on a bearing of 055° and a hospital is 750 metres from a school on a bearing of 165°.

(a) Using a scale of 1 cm to represent 100 metres, draw an accurate diagram to show the positions of the three places.

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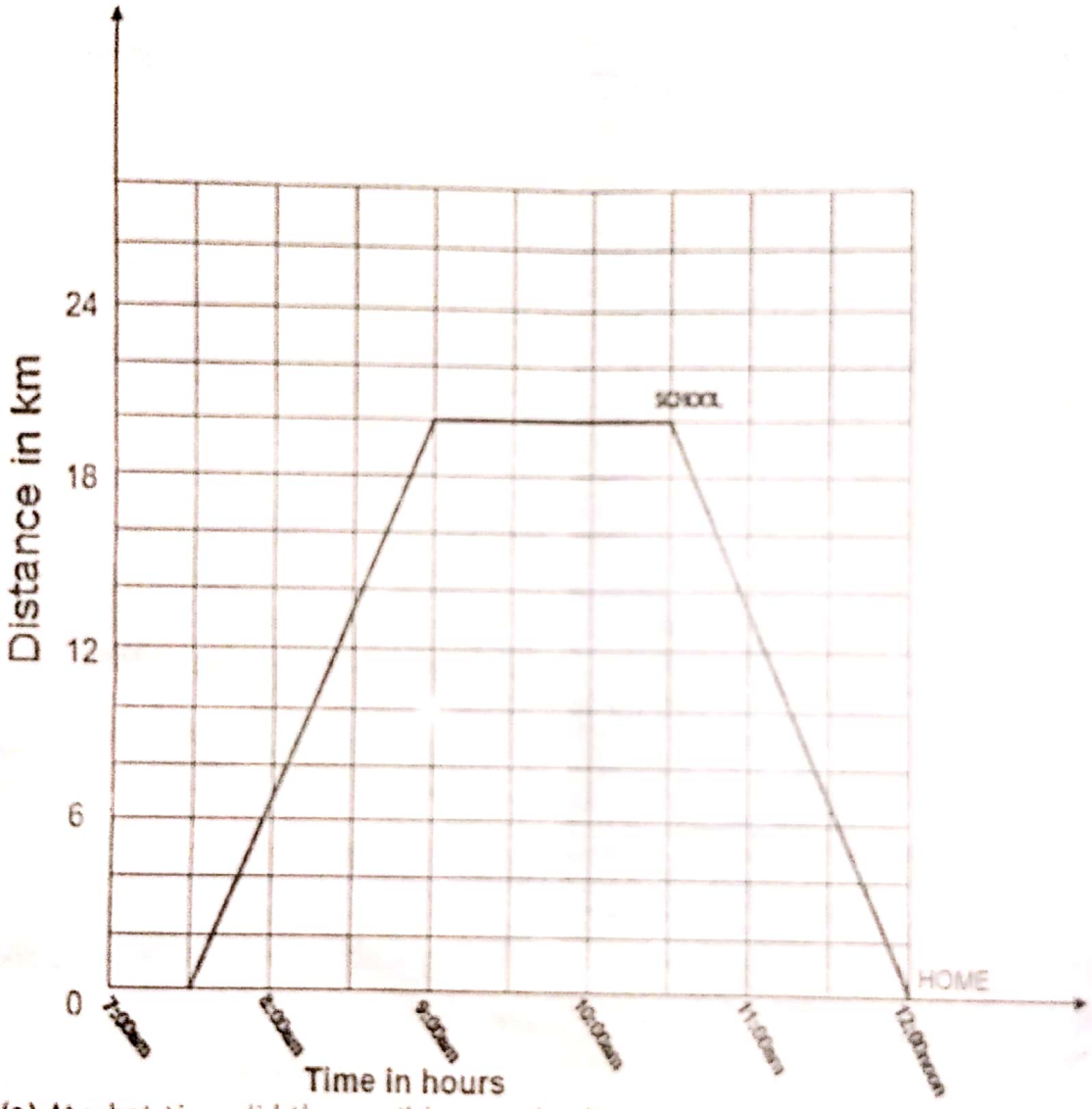
(b) Work out the shortest distance from the mosque to the hospital in metres.

(06 Marks)

32. The graph below shows the journey made by a pupil from home to school and back home.



(a) At what time did the pupil leave school?

(b) For how long did the pupil stay at school?

(c) Calculate the average speed of the pupil while going to school.

(05 Marks)

END

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