BROAD EXAMINATIONS®
P.7 MATHEMATICS EXAMINATION
PRE-PLE TRIAL SET V 2024

Time allowed: 2 hours 30 minutes.

Random No.						Personal No.		

Pupil's Name:...

School Name: ....

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 EXAMINER'S 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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....
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Approved by:

Team Head Mathematics Dept.

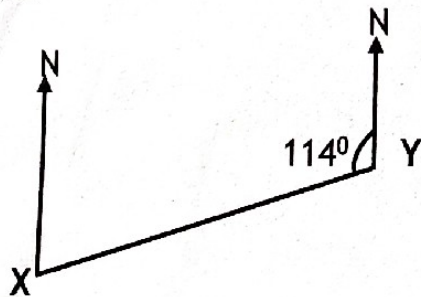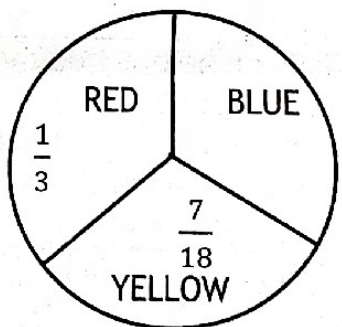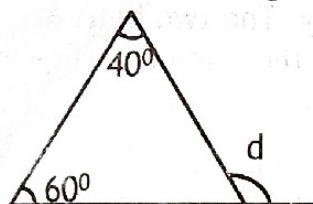| 1.	Add; 4689 + 975	2.	Work out; ⁻4 + ⁻6
3.	Give that set A = {b, c, d, e, f}, how many elements has set A?	4.	Express 112_{five} to ordinary base.
5.	A trader bought a dress at sh. 24500 and later sold it at sh. 30,000. Find her profit.	6.	List all factors of 16.
7.	In the diagram below, find the bearing of X from Y.	8.	Work out; $\dfrac{5}{9} - \dfrac{2}{9}$
9.	Susan bought 4609 tonnes of maize flour last year. Express the quantity of maize flour in scientific notation.	10.	Using a ruler, a pencil and a pair of compasses only, construct a line through point F parallel to line GH below.
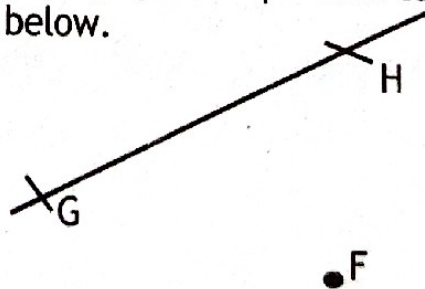
11.	Subtract;
	
	Years Months
	   8 6
	  -3 7
	_____
		12.	How many square tiles of side 8cm can be used to cover a floor of area 768cm²?

13.	A speeding car covered a distance of 42km in 45 minutes. Calculate its speed in kilometres per hour.	14.	The average age of three girls is 14 years. If two of them are 12 years and 15 years old, find the age of the third girl.
15.	Work out the Lowest Common Multiple (LCM) of 16 and 12.	16.	The pie-chart below shows the number of pupils in different streams of P.6 class at a school. Find the fraction for Blue stream.
17.	If k = 5, find the value of 4k.	18.	Expand 4,637 using exponents.

19.	Find the size of angle **d**.	20.	The table below shows the marks scored by some pupils in a test.

19. Find the size of angle **d**.

40^0

60^0

d

20. The table below shows the marks scored by some pupils in a test.

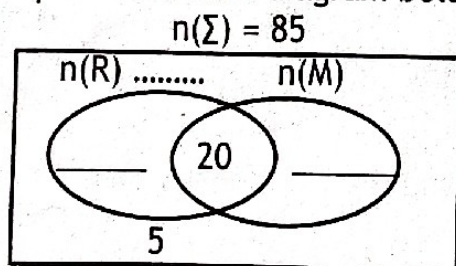| Mark	6	9	10	12
Freq.	1	3	4	2

Find the median mark.

SECTION .B. (60 Marks)

21. The interior angles of a triangle are in the ratio 3:2:4. Find the size of each angle.

(06 Marks)

22. In a class of 85 pupils, 2p like rice (R), 32 like matooke (M), 20 like both rice and matooke while 5 like none of these.

(a) Complete the venn diagram below.

$n(\Sigma) = 85$

n(R) .... n(M)

20

5

(b) Find the value of **p**.

(c) Find the probability of selecting a pupil that likes at least one of the foodstuffs at random to be a class monitor.

23.	Two bells, one for lower and another for upper primary are rung to change lessons at regular intervals of 40 minutes and 50 minutes respectively. The two bells are first rung at once to start lessons at 8:15 am, at what time will they ring together again?
	(04 Marks)

24. (a) Solve the inequality;

$$\frac{3}{1} < 4 - \frac{1}{3}y \le 5.$$

(b) Write down the solution set for the above inequality.

(05 Marks)

25. Study and complete the table below correctly.

Denomination	No. of notes	Total amount
Two thousand shillings	_____	Sh. 10,000
Ten thousand shillings	5	Sh. _____
Twenty thousand shillings	2	Sh. _____
_____	12	Sh. 60,000

(04 Marks)

26. Kombozi sold two cows, one for sh. 1,080,000 making a loss of 10% and another one for sh. 1,725,000 making a profit of 15%. Calculate the total amount of money Kombozi had bought all the two cows.

(05 Marks)

27. Below is a P.7 class timetable for two days for lessons taught before lunch.

DAY	8:00a.m 8:40a.m	8:40a.m 9:20a.m	9:20a.m 10:00a.m	10:00a.m 10:45a.m	10:45a.m 11:30a.m	11:30am 12:10p.m	12:10p.m 1:00p.m	1:00p.m 2:00p.m
MON	ENG	ENG	SCI	B R E A K	MTC	MTC	SST	L U N C H
TUE	MTC	MTC	SST		ENG	ENG	SCI	

(a) For how long do the pupils study SST on Monday?

(b) How long is break time?

(c) Calculate the total time Mathematics is taught in the two days.

(05 Marks)

28. (a) Using a ruler, a pencil and a pair of compasses only, construct a rhombus ABCD such that AC = 8cm and BD = 6cm.

(b) Measure line AB.

29. Study the diagrams below and use them to answer the questions that follow.
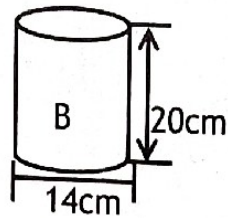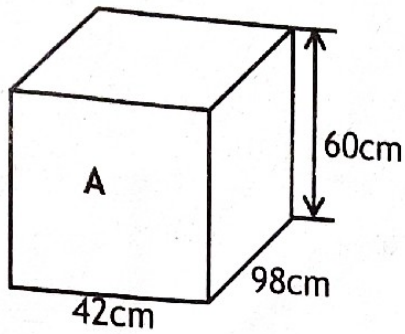
(a)	If tins of size **B** are packed in Box **A**, how many tins can fill the box?	(b)	Calculate the volume of space left after packing all the tins.
			(06 Marks)

30. When marking a test, a teacher awards 3 marks for every correct answer and subtracts a mark for every wrong answer. The test contained 20 questions.

(a)	If Joan did the test and gave 15 correct answers, how many marks did she get?	(b)	A pupil did the test and got 48 marks. How many wrong answers did the pupil give?
			(04 Marks)

31. A boy who deals in selling eggs bought two trays of eggs each at sh. 12000. On his way to the shop, 10 eggs got spoilt. At what price must he sell each of the remaining eggs in order to realise a profit of 20%?

(05 Marks)

32. The pictograph below shows the number of fish a fishmonger sold in four days.

Day	No. of fish
Mon.	🐟 🐟 🐟
Tue.	🐟 🐟
Wed.	🐟 🐟 🐟
Thur.	🐟 🐟 🐟 🐟 🐟

🐟 represents 12 fish

(a) How many fish did he sell on Wednesday?

(b) How many more fish did he sell on Thursday than on Tuesday?

(c) If he sold each fish for sh. 7500, how much money did he get from the sale of fish on Monday?