



BROAD EXAMINATIONS®

P.7 MATHEMATICS EXAMINATION PRE-PLE TRIAL SET II 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

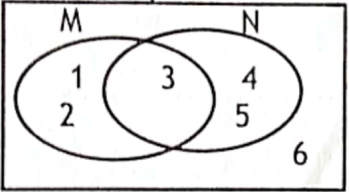

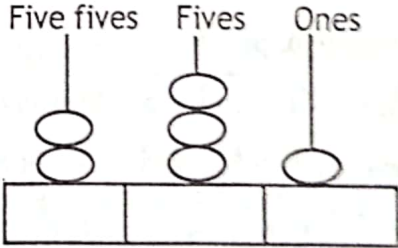
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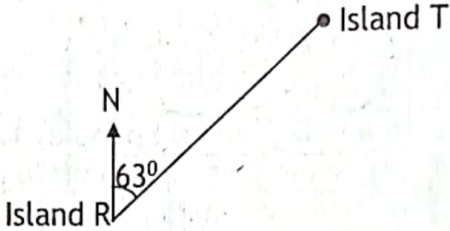
Approved by:

ANF

Team Head Mathematics Dept.

SECTION .A. (40 Marks)

<p>1. Subtract; $\begin{array}{r} 347 \\ -123 \\ \hline \end{array}$</p>	<p>2. Find the value of 6 in 3679.</p>
<p>3. Study the Venn diagram below and answer the question that follows.</p>  <p>Find $n(N - M)$</p>	<p>4. Find the square root of $20\frac{1}{4}$.</p>
<p>5. Express $3\frac{1}{2}$ as an improper fraction.</p>	<p>6. Solve; $8 - 5k = 23$</p>
<p>7. What evening time is shown on the clock face below?</p> 	<p>8. Write the base five number represented on the abacus below.</p> 
<p>9. The cost price of a jacket is sh. 25000. A shopkeeper sold it making a profit of sh. 2500. At what price did he sell the jacket?</p>	<p>10. The swimming pool at a certain hote measures 10m by 8m by 13m. Work out the volume of the swimming poo</p>

11.	Without dividing, show that 2607 is divisible by 11.	12.	Find the value of P in $2^P \times 16 = 64$.
13.	Given that $W = \{x, y\}$, list all possible proper subsets of set W.	14.	Use the diagram below to find the bearing of Island R and Island T. 
15.	The temperature of a place rose from -6°C to 20°C . By how many degrees did it rise?	16.	The number of pupils in a class increased from 480 pupils in 2023 to 540 pupils in 2024. In what ratio did the number of pupils increase?
17.	Round off 476 to the nearest hundreds using a number line.	18.	At Mabira pub, $\frac{2}{5}$ of the people who watched a match between Chelsea FC and Manchester United FC were Arsenal fans. If 243 people were not Arsenal fans, how many Arsenal fans watched the match?

19. The following cards were put in a box to choose the questions in a mathematics contest.

2 6 5 7 9 12 16

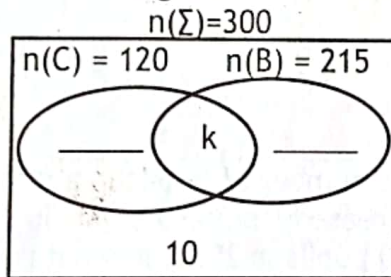
Find the probability of picking a number that is a multiple of 3.

20. Twenty poles were planted in a straight line. If the poles were placed at intervals of 5m, find the distance from the first to the last pole.

SECTION .B. (60 MARKS)

21. In a village of 300 people, 120 people plant Coffee (C), 215 people plant Bananas (B), some plant both coffee and bananas while 10 people plant none of the two.

- (a) Use the information above to complete the Venn diagram below.

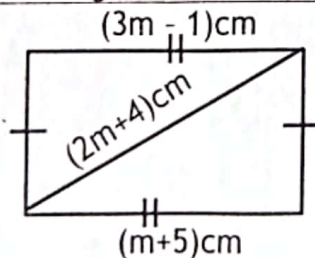


- (b) How many people plant both coffee and Bananas?

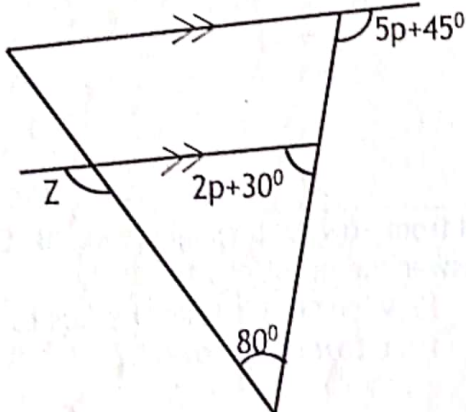
- (c) If a farmer is selected at random to be a principal farmer, what is the probability of selecting a farmer who plants both coffee and bananas?

(05 Marks)

22. Study the figure below carefully and use it to answer the questions about it.



- (a) Find the value of m .

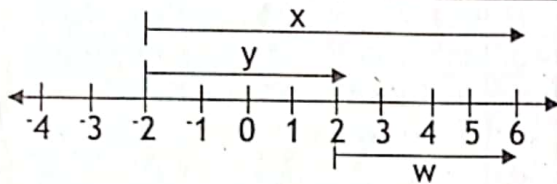
(b)	Work out the area of the rectangle above.		(05 Marks)
23.	Given the numeral 20,754;		(05 Mark)
(a)	Write the numeral in words.	(b) Find the quotient of the value of 2 and the value of 5 in the numeral.	(05 Mark)
24.	Study the diagram below carefully and use it to answer the questions about it.		(04 Mar)
			Find the value of; (i) p (ii) z
25.	In a class, there are 10% less boys than girls. If there are 44 girls in the class,		(4 ma)
(a)	Find the percentage of boys.	(b) How many boys are in the class?	(4 ma)

26. (a) Solve for h in $3 - (h - 4) = 2(8 + h)$.

(b) Solve and write the solution set for $K - 2 > \frac{k + 6}{2}$

(05 Marks)

27. Study the number line below and use it to answer the questions about it.



(a) Write the integer represented by;

(i) $w =$

(ii) $x =$

(iii) $y =$

(b) Write the mathematical sentence for the above number line.

(05 Marks)

28. The timetable below shows how a bus moved from Town A through Towns B, C and D to Town E. Study it carefully and use it to answer the questions about it.

Town(s)	Arrival time	Departure time
A	_____	10:00am
B	11:15am	11:30am
C	1:00pm	1:20pm
D	3:30pm	3:45pm
E	5:00pm	_____

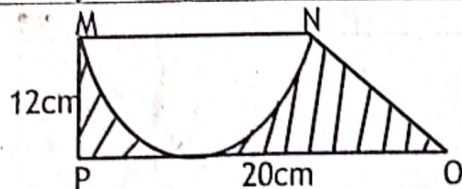
(a) How long did it take the bus to move from town B to town D?

(b)	At what time did the bus leave town D?	(c)	If town A and town E are 98km apart, calculate the average speed for the whole journey.
(06 Marks)			

29. In a seminar, 40% are males and the rest are females. $\frac{2}{3}$ of the females are above 30 years and $\frac{1}{4}$ of the males are below 30 years. If 30 males are above 30 years,

(a)	how many people attended the seminar?	(b)	how many females are below 30 years?
(06 Marks)			

30. Study the figure below and use it to answer the questions about it.



If the area of the trapezium MNOP above is 204cm^2 ,

(a)	Find the length MN.	(b)	Find the area of the shaded part.
(05 Marks)			

31. (a) Using a ruler, a pencil and a pair of compasses only, construct square WXYZ where line $XY = 4.8\text{cm}$.

(b) Measure diagonal WY.

(05 Marks)

32. The table below shows the number of pupils and the marks obtained in a test. Study it carefully and answer the questions about it.

Marks	25	90	70	85
No. of pupils	4	1	3	k

- (a) If the mean mark is 57, find the value of k.

- (b) Find the modal frequency.

(05 Marks)

END