

THE ARIAL EXAMINATIONS®



P.7 MATHEMATICS EXAMINATION

PRE-PLE SET III TERM III - 2022 (Abridged Curriculum)

Time allowed: 2 hours 30 minutes

School No.						Personal number		

Candidate's Name: _____

Candidate's Signature _____

District Name: _____

Read the following Instructions carefully:

This paper is made up of two sections: A and B.

1. Section A has 20 questions (40 marks).
2. Section B has 12 questions (60 marks).
3. Answer ALL questions in both sections A and B.
4. All answers must be written in spaces provided
Using blue or black pens or Ink. Only diagrams
Should be done in pencil.
5. Unnecessary crossing of answers will lead to
Loss of marks.
6. Do not fill anything in boxes indicated for
Examiners' Use only.

FOR EXAMINERS' USE ONLY

page	Marks	Initials
Page 2		
Page 3		
Page 4		
Page 5		
Page 6		
Page 7		
Page 8		
Total		

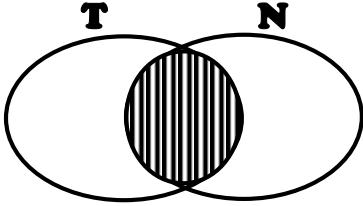
Subject teacher's Comment to the learner

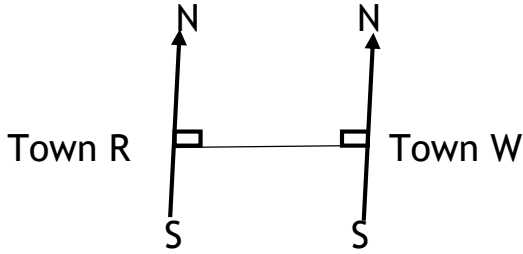
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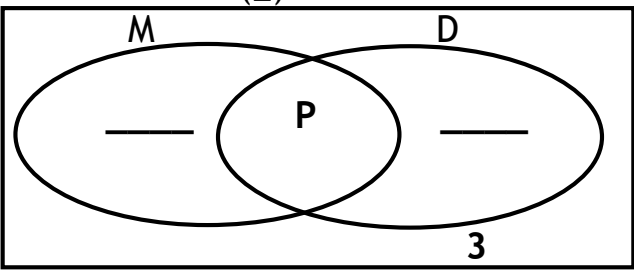
Team Leader

SECTION A: 40 MARKS

1.	Work out : $71 + 27$	2.	Write in figures: Ninety eight thousand, fifty seven
3.	Workout : $\frac{7}{12} \div \frac{7}{15}$	4.	Find the sum of the first three square numbers
5.	Find the value of : $3^2 + 8^0$	6.	In the Venn diagram below, describe the un-shaded region 
7.	What number has been expanded below? $(6 \times 10^2) + (7 \times 10^0) + (5 \times 10^{-1})$		

8.	Find the bearing of town R from town W in the diagram		
			
9.	Bamwine covered a distance of 9km. What distance did he cover in centimeters?	10.	Solve: $\frac{y}{3} - 1 = 2$
11.	Today is Wednesday. What day of the week will it be after 31 days?	12.	Musa's journey which lasted for $1\frac{3}{5}$ hours had started at 10:40am. When did it end?
13.	Find the next number in the sequence; 1, 2, 8, 48, _____		
14	A trader sold a phone for sh.44000 and realized a profit of shs.4000. Calculate the trader's cost price for the phone?		

15.	Using a ruler, a pencil and a pair of compasses only, construct an angle of 120° in the space below?	16.	Round off 69.54 to the nearest whole number.
17.	Given that set $V = \{m, a, r, k\}$ and set $W = \{c, a, r, e\}$. Find the $n(W)'$.		
18.	Convert 10m/s to Km/h.		
19.	Given that Ksh1=Ugsh36 and Us\$1=Ugsh 3600. If Kakuru bought a new motorcycle at Ksh120000, how much money did he pay in US dollars?		
20.	Find the volume of the solid below (Use π as $\frac{22}{7}$) <div data-bbox="211 1612 446 1896" data-label="Image"> </div>		

SECTION B {60 MARKS}		
21.	<p>In a class of 53 pupils, 20 pupils like debating (D) only, 4p like Music (M). If P pupils like both debating and music and 3 like neither of the two;</p> <p>(a) Complete the Venn-diagram below. (02mks)</p> 	(b) Find the value of P. (02mks)
(c)	Find the chance of picking a member who likes debating to be the class monitor. (02mks)	
22.	The average weight 4 girls is 55kg. When their Matron joins, the average weight becomes 60kg. Find the weight of the Matron. (04mks)	

23. Below is a base three numeration. Answer the questions that follow;

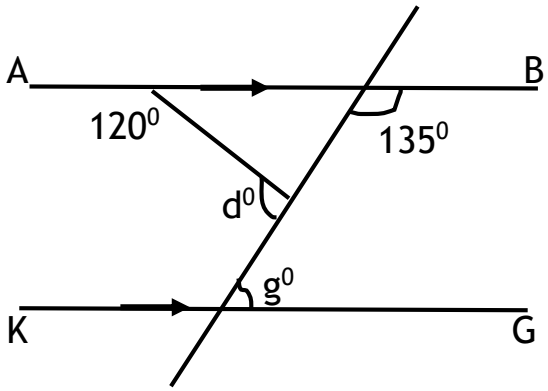


(a) Write the base three number above. (02mks)

(b) Change the above base three number to base five. (03mks)

24 Study and complete the table below correctly (05mks)

ITEMS	QUANTITY	UNIT COST	AMOUNT
Millet	2kg	Sh4000 per kg	sh -----
Soap	-----bars	Sh8000 a bar	Sh 24000
Meat	$1\frac{1}{2}$ kg	Sh-----per kg	Sh 21000
Salt	750g	Sh 2000 per kg	Sh-----
Total expenditure			Sh-----

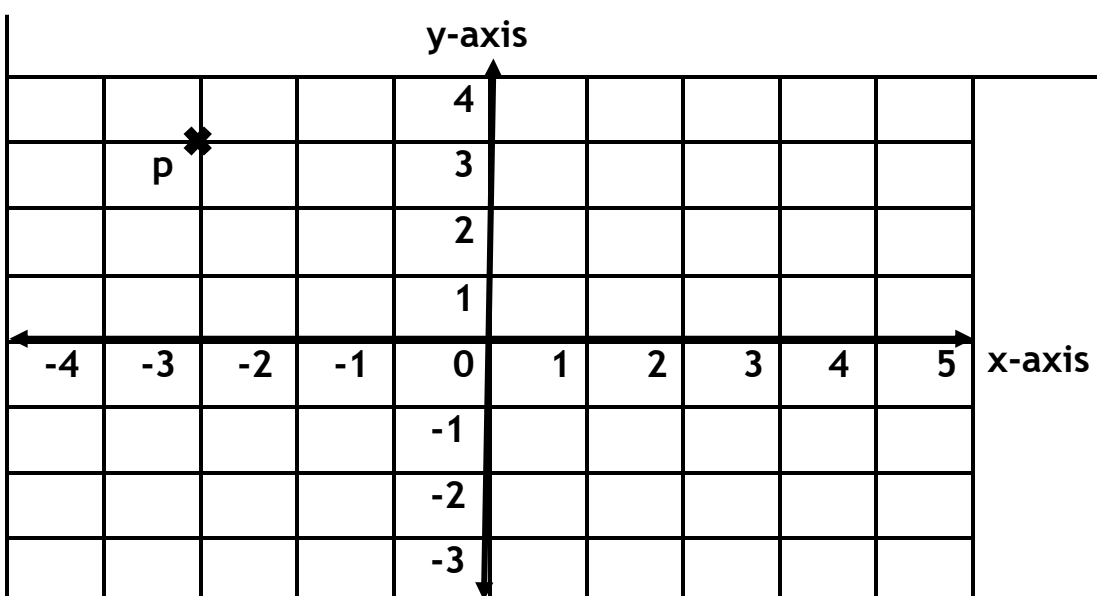
25.	(a) Change 0.375 to a simplified common fraction. (02mks)	
	(b) Simplify : $\frac{0.48 \times 1.8}{72 \times 0.24}$	
	(03mks)	
26	<p>In the diagram below, line AB is parallel to line KG. Use it the answer the question that follow.</p> 	
	Find the angle g. (02mks)	b Angle d (03mks)

- | | |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 27. | <p>Ruth, Rinah and Ritah shared a certain sum of money in the ratio of 3:9:16 respectively. If Ritah got sh6500 more than Ruth,</p> <p>(a) How much money did they share altogether? (3mks)</p> <p>(b) Calculate Rinah's share (02mks)</p> |
| 28. | <p>The area of a circular card is 616cm^2.</p> <p>a) Find its radius(r) ($\pi = \frac{22}{7}$) (03mks)</p> <p>(b) Work out the circumference of the card. (02mks)</p> |

(b) Solve: $5(3k - 1) - 4(3k + 1) = 18$

(03mks)

32. Study the coordinate graph below and use it to answer the questions that follow



(a) Write the coordinates of point P

(01mk)

(b) Plot points Q(-3, -2) and R(+4, -2) on the graph

(02mks)

c) Join points P to Q and Q to R

(01mk)

(d) Locate point 'S' on the graph, join it to P and R such that PQRS is a rectangle.
(01mk)

END