

THE ARIAL EXAMINATIONS®

P.7 MATHEMATICS EXAMINATION

PRE-PLE SET II 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

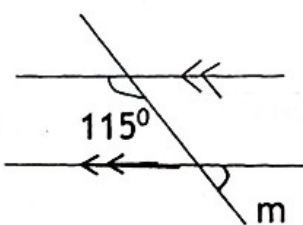
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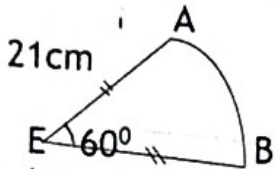
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Team Leader

SECTION A: 40 MARKS

1.	Workout: $398 - 275$	2	Find the value of 6 in the number 8675.
3	Simplify: $3p - 5p + 7p$	4	Fill in the missing values <div data-bbox="954 521 1289 958" data-label="Diagram"> <pre> graph TD A[] --- B[2] A --- C[24] C --- D[2] C --- E[12] E --- F[2] E --- G[] G --- H[2] G --- I[3] </pre> </div>
5	Change 3500g to Kg	6	5 bars of soap cost sh.40000. How many bars of soap can be bought for sh24000?
7	Find the next number in the sequence. 100, 99, 95, 86, _____	8	Workout the area of the shape in the figure below. <div data-bbox="858 1496 1433 1697" data-label="Diagram"> </div>

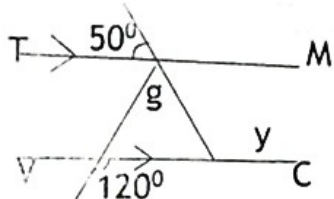
9.	Solve: $x + 5 = 2$ (finite 6)	10	Find the square root of 784
11	Write 13_{ten} as a binary system number.	12	<p>In the diagram below, find the size of angle m in degrees.</p> 
13	A motorist covered a distance of 168km in 3 hours and 30 minutes. Calculate the motorist's speed in Km/hr.	14	A die is rolled once, what is the probability that a factor of 8 shows up?
15	Solve: $5p - 2(p - 1) = 1$	16	An average of 58 births is recorded daily in ACT hospital. How many births are recorded in a month of March?

23	<p>Use the sector EAB below to answer the questions that follow.</p>  <p>a) Find the length of the arc AB (2 marks)</p>
	<p>b) Workout the perimeter of the sector EAB. (2marks)</p>
24	<p>The exterior angle of a regular polygon is 100° less than its interior angle. a) Find the size of the exterior angle. (02 marks)</p>
	<p>b) How many sides has the polygon? (2marks)</p>
	<p>c) Calculate the interior angle sum of the polygon. (2marks)</p>
25	<p>a) Simplify: $0.75 - 1.2 + 0.828$. (02 marks)</p>

b) Simplify: $\frac{3.6 \times 2.4}{1.2 \times 4.5}$

(3marks)

In the diagram below, line TM is parallel to line VC. Use it to answer the questions that follow.



26

Find the size of g in degrees. (03 marks)

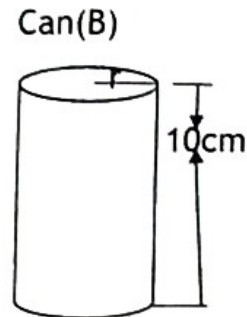
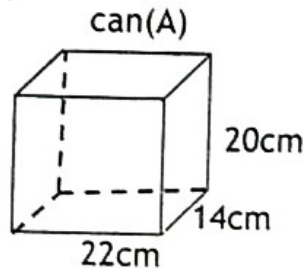
b) Work out the size of angle y in degrees. (02 marks)

27 a) Find the value of $\frac{3m-p}{n^2}$ when $m=3$, $n=6$ and $p=2$

(2 marks)

b) Abaho is 15 years older than Aine. In 10 years time, their total age will be 57 years, how old is Abaho now? (3 marks)

28. The diagram below shows a rectangular can (A) and a cylindrical can (B). If both cans can hold the same amount of water when full, find the radius(r) of can(B).
(take π as $\frac{22}{7}$) (05 marks)



29. Using a ruler, a pencil and a pair of compasses only.
Construct a rectangle DMNT where DM= 7cm and MN=6cm
(4marks)

b) Measure the angle DMT. (01 mark)

30	A bus travelled at a steady speed of 50km/hr for 6 hours to town R and then at 60km/h for 4 hours to town W. calculate its average speed for the whole journey. (5marks)
31.	$\frac{2}{3}$ of Tana's chicken are white and the rest are red. If the red chicken are 160, a) How many chicken are there altogether? (03 marks)
	b) If he is to sell each white chicken at sh18000, how much money will Tana get? (02 marks)
32	In PASS' Primary School, poultry farm, there 9 pullets, 12 hens, 3 cocks and 6 capons. Show this information on a circle graph. (5 marks)

END