THE ARIAL EXAMINATIONS®
P.7 MATHEMATICS EXAMINATION
PRE-PLE SET IV TERM III-2022 (Abridged Curriculum)

Time allowed: 2 hours 30 minutes

School No.						Personal number		

Candidate's Name: _____

Candidate's Signature _____

District Name: _____

FOR EXAMINERS' USE ONLY

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

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.

Subject teacher's Comment to the learner

_____
_____
_____

Approved by

....
Team Leader

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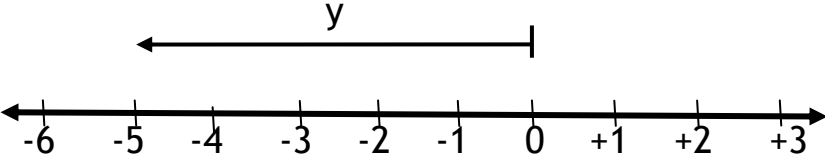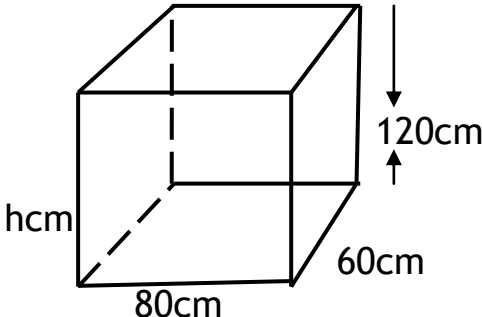
1.	Work out: 32 x 2	2.	Write XLIV in Hindu Arabic numerals
3.	Simplify: 5 – 4(1-k)	4.	Find the next number in the sequence: 60, 59, 55, 46, 30_____
5.	Work out: (125 x 4) – (4 x 25)	6.	In the Venn diagram below, shade the complement of Set(p–Q)
7.	What percentage of 2 metres is 80cm?	8.	Find the value of the digit in hundred thousands place value in the number 7,894,562
9.	The perimeter of a semi-circle is 36 metres. Find its diameter.	10	*In diagram below, find the size of angle x in degrees.*

Question 6 diagram:

(Σ)

Q   p

Question 10 diagram:

40⁰

x

11.	A motorist took 50 minutes to cover a distance of 45km. Calculate the motorist's speed.	12.	3 counter books cost sh. 10,500. How many counter books can be bought for sh17,500?

13. *Use the number line below to answer the questions that follow.*

	(a) Identify the integer shown by arrow '**y**' above.	(b) State the absolute value of integer '*y*'.

14.	10 men take 12 days to do a piece of work. How many men working at the same rate do the same piece of work in 8 days?	15	A trader banked sh.3 million in a SACCO if he banked 20,000 shilling notes only, how many notes did he bank?

16.	Using a rulers, a pencil and a pair of compasses only, construct an angle of 150⁰ in the space below.	17.	250g packets of tea leaves were packed from a 7.5kg tea leaves bag. How many packets were packed?

18.	Alexa will celebrate her birthday next week. What is the probability that Alexa will celebrate it on Sunday?

19.	Express 10 m/s as Km/h	20.	Solve: $\frac{2P}{5} - 3 = 7$.

21.	The Venn diagram below shows the number of people who can speak Kiswahili (K), English (E) and other languages in a certain village. Use it to answer the questions that follow. $n(\Sigma)=$

	(a) If 49 people cannot speak Kiswahili, find the value of x. (02 marks)	(b) How many people cannot speak English? (02 marks)

(a) How many people are in this village? (02 marks)

22.	(a) Write 0.0807 in standard form (02 marks)	(b)	Solve $2^{2x} \times 2 = 32$ (2mks)

23	(a) Today is Thursday. What day of the week was it 23 days ago? (2mks)
	(b) When marking a test of 25 questions, a teacher awarded 4 marks for every correctly answered question and deducted 2 marks for every wrongly answered question. How many questions were correctly answered by a pupil who scored 58 marks? (04marks)

24 **Complete the base three addition table below.** (4mks)

+	0	1	2
0	0	1	_____
1	1	2	_____
2	2	_____	_____

☐

25 (a) Simplify: $\dfrac{1.24 \times 3.06}{0.4 \times 0.31}$ (03mks)

(b) Kirstine was given $\frac{4}{5}$ of the sugarcane. She gave $\frac{3}{8}$ of her share to Faith. What fraction of sugar cane did Kirstine remain with? (02 marks)

26	The rectangular tank shown below contains water of capacity 432 litres	(a) Find the height(h) of the water contained in the tank. (03 marks)

120cm

hcm

60cm

80cm

(b) Calculate the capacity of the water that completely make the tank full.(3mks)

27	A boy went to the market and bought the following items

3 T-shirts at sh.8000 each.

2 belts at sh.5000 a belt

$1\frac{1}{4}$ dozens books at sh. 1200 a book

If the boy was allowed a cash discount of 5%, calculate the boy's actual pay. (5mks)

28	*In the triangle ABC, line AB is parallel to line DE. Answer the questions that follow*. **Find the size of angle AEB (04mks)**
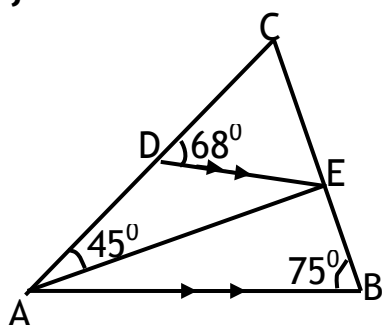
29	In a school, $\frac{12}{25}$ of them are boys and the rest are girls. 60% of the boys are boarders and 20% of the girls are day scholars. If 148 pupils in the school are day scholars, find the number of pupils in the whole school? (05MKs)

30	The time table below shows the route taken by a bus.

Station	Arrival time	Departure
A		6:00am
B	7:00am	7:15am
C	10:00am	10:30am
sD	1:00pm	1:30pm
E	6:45pm	s

(a) Express the time at which the bus leaves station D in a 24 hour clock. **(02mks)**

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(b) For how long does the bus stay at station C? (01mk)	(c) How long does the bus' journey from station A to E take? (02mks)

31 Julius is 55 years old and Joshua is 15 years old. After how many years will Julius be thrice as old as Joshua.? **(04mks)**

32 Using a rule, a pencil and a pair of compasses only, Construct a triangle DEC in which DE=6.4cm, angle DEC=60° and angle EDC=45°. Drop a perpendicular line from point C to meet line DE at K. (05MKs)

(b) Measure the length CK. **(01mk)**

END