

BUTALEJA DISTRICT ACADEMIC BOARD
P.L.E MOCK EXAMINATIONS 2024
MATHEMATICS

TIME ALLOWED: 2 HOURS 30 MINUTES

						Personal No.		

INDEX No.

Candidate's Name:

Candidate's Signature:

Random No.

Read the following instructions carefully.

1. This paper has two sections: A and B.
Section A has 40 Questions (40 marks) and B has 15 Questions (60 marks).
2. Answer all Questions in both sections. All answers in both sections must be written in the spaces provided.
3. All answers must be written in Blue or Black ball point pens or ink. Only diagrams and graph work must be done in pencil.
4. Any handwriting that cannot be read may lead to loss of marks.
5. Do not fix anything in the table indicated "For Examiner's Use Only".

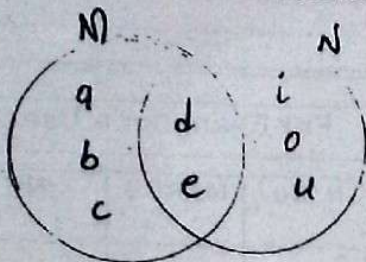
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QN. No.	MARKS	INITIALS
1-5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

1 Workout: 100-1

2 Write 2024 in words

3 Study the venn diagram below and answer the questions that follow.



List down the elements of set N.

4 Arrange $\frac{1}{2}$, $\frac{3}{5}$, $\frac{3}{4}$ in descending order.

5 Express 144km/hr as m/s

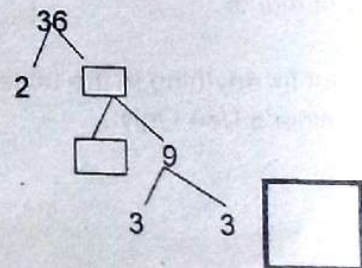
6 A 40 minutes lesson ended at 4:30pm. At what time did the lesson begin?

7 Workout $\frac{1}{3} + \frac{2}{5}$

8 Increase shs. 15,000 in the ratio of 8:5.

9 In the space below, construct an angle of 30° using a pair of compasses and ruler only.

10 Fill in the missing prime factors in the factor tree below.

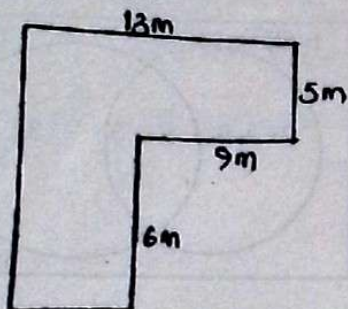


11 Workout: Weeks 7 Days 4
- 3 6

12 Find the next number in the sequence below. 49, 64, 81, 100, _____

13 Find the digit that should be written in the box to make the whole number divisible by 11: 67 390

14 Below is a piece of land owned by a poultry farmer.



Calculate the perimeter of the piece of land.

15 Tom scored the following marks in a series of tests. 80, 60, 20, 65, 70, 40. Find his median mark.

16 Round off 799.76 to the nearest ones.

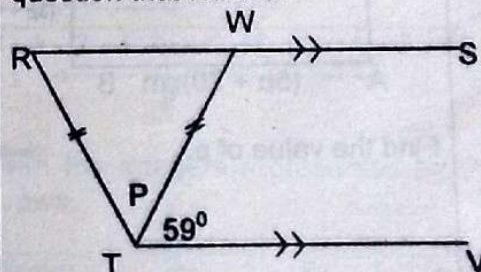
17 Pupils of P.7 class were told to stand on a line. Mutyere was the 4th from one side and the 6th from the other side of the line. How many pupils were standing on the line?

18 Solve: $\frac{r}{4} - 3 = 2$

19 Given that $t = \frac{2}{7}$ and $P = \frac{4}{21}$

Evaluate $\frac{t}{p}$

20 On the diagram below, line \overline{RS} is parallel to line \overline{TV} and $\overline{RT} = \overline{TW}$. Study it carefully and answer the question that follows.



Workout the value of P.

SECTION B

21 (a) Find the place value of 4 in 340_{five} .

(1mrks)

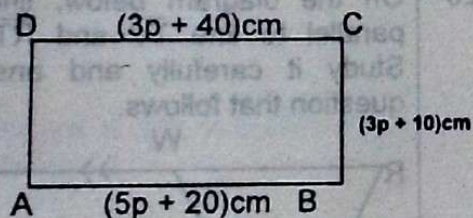
(b) Workout: $210_{\text{five}} - 143_{\text{five}}$

(2mrks)

(c) Given that $22_r = 30_{\text{four}}$. Find the value of r.

(3mrks)

22 The figure below shows a metallic rectangular sheet. Use it to answer the questions that follow.



(a) Find the value of p.

(2mrks)

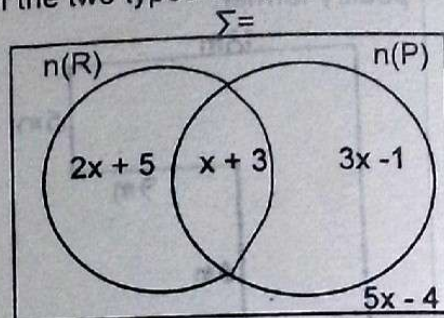
22 (b)

Workout the area of a metallic sheet.

(3mrks)

23

On the Venn diagram below, the number of members of staff who like Rice (R) is equal to the number of members of the staff who like neither of the two types of food.



(a) Find the value of X

(2mrks)

(b) How many members are on this staff?

(2mrks)

(c)	What is the probability of picking a member from the staff who likes Posho only to become the headteacher? (1mrk)	26	Workout: $\frac{0.32 \times 1.2}{0.4 \times 0.016}$ (3mrks)								
24	In Muliro village, the ratio of men to women to children is 2:3:5 respectively, if there are 70 more women than men in the village.	(b)	Simplify $\frac{1}{2} - \frac{3}{4} + \frac{4}{5}$ (2mrks)								
(a)	What is the total population of the village? (3mrks)										
(b)	How many more children than women are in that village? (1mrk)	27	Use the number – line below to answer the questions that follow.								
		(a)	Write the integers represented by the arrows. (1mrk each)								
			<table border="1"> <tr> <td>Arrow</td> <td>m</td> <td>n</td> <td>p</td> </tr> <tr> <td>Integers</td> <td></td> <td></td> <td></td> </tr> </table>	Arrow	m	n	p	Integers			
Arrow	m	n	p								
Integers											
		(b)	Write the mathematical statement describing the movement of arrows. (1mrk)								

25

Using a pencil, a ruler and a pair of compasses only. Construct a quadrilateral ABCD such that $AB = 6\text{cm}$, $\angle ABC = \angle BAD = 60^\circ$ and $AD = BC = 3\text{cm}$.

(5mrks)

28

(a)

Namarome went to the super market and bought the following items shown on the table below.

Study it carefully and complete it.

Item	Quantity	Unit Cost	Total Amount
Sugar	2 $\frac{1}{2}$ kg	4000 per kg	Shs _____
Soap	_____ Bars	2000 per bar	Sh 10000
Bread	3 loaves	_____ Per loaf	Sh 13500
Blue band	_____ Tins	2500 per tin	_____
Total			Shs 43,500

(5mrks)

28
(b)

If she was left with sh 6500 in her pocket, how much did she have at first?

(1mk)



29
(a)

Obote is 13 years old now. Amin is 36 years old now. In how many years' time will Amin be twice as old as Obote?

(3mrks)

(b)

Which year will this be?

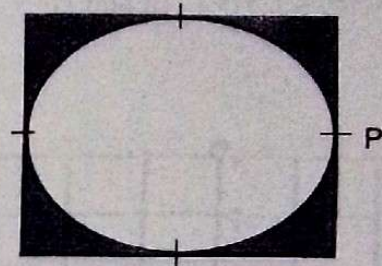
(2mrks)



30

In the figure below, the area of the shaded part is 42cm^2 . Find the value of P. $\pi = \frac{22}{7}$

(4mrks)



31

The interior angle of a regular polygon is 100° more than its exterior angle.

a)

Name the polygon.

(2mrks)

b

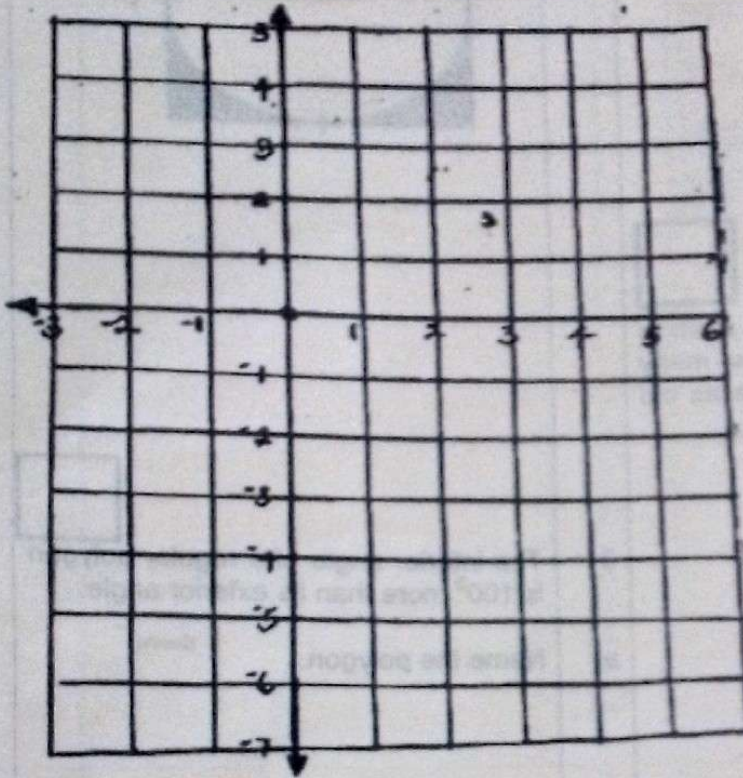
Workout its interior angle sum.

(3mrks)

32. (a) Use the co-ordinate graph below to plot the following points.

(4mrks)

$W(+2, -2)$, $X(+5, -2)$, $Y(+2, -6)$ and $Z(+5, -6)$.



(b) Join the points W to X to Y to Z to W.

(1mrk)

(c) Name the figure formed.

(1mrk)

END

8

BUTALEJJA P.7 P.L E MOCK

