

**BUDAKA DISTRICT ACADEMIC BOARD**  
**PLE MOCK EXAMINATIONS, 2024**  
**MATHEMATICS**

*Time Allowed: 2 Hours 30 Minutes*

INDEX NO.									
-----------	--	--	--	--	--	--	--	--	--

CANDIDATE'S NAME: .....

CANDIDATE'S SIGNATURE: .....

SCHOOL'S EMIS NO: .....

DISTRICT NAME: .....

**READ THE FOLLOWING INSTRUCTIONS CAREFULLY**

1. This paper has two sections **A** and **B**
2. All the working in both sections **A** and **B** should be shown in the spaces provided
3. All working must be done using a blue or black ball point pen or fountain pen. Diagram **MUST** be drawn in pencil
4. Unnecessary changes of work may lead to loss of marks
5. Any handwriting that can not be easily read may lead to loss of marks
6. Do not fill in anything in areas indicated for examiners use only and those inside the paper.

**FOR EXAMINER'S USE ONLY.**

SECTION	MARKS
<b>SECTION A</b>	
<b>SECTION B</b>	
<b>TOTAL</b>	

# SECTION A (40 MARKS)

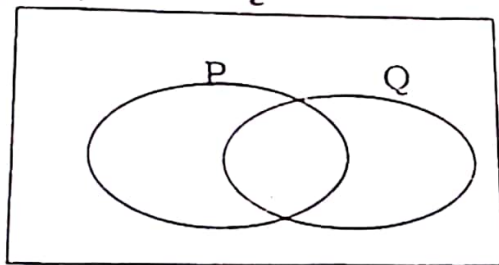
1. Work out:  $96 \div 3$

2. Solve for n:  $\frac{3n}{4} = 12$

3. Write: Nine hundred ninety-nine thousand ninety-nine in figures.

4. Work out  $1\frac{3}{4} - 1\frac{1}{3}$

5. Shade  $P^1$  in the Venn diagram below.



6. A chef mixes milk with water to make tea in the ratio of 3:1 respectively. If he used 5 litres of water. How much tea in the litres did he prepare?

7. Using a pair of compasses and a ruler only, construct an angle of  $105^\circ$

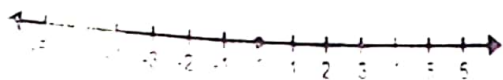
8. The mean of K, K+4 and 2K is 4. Calculate the value of K.

9. Work out:  $432_{\text{five}}$

$- 124_{\text{five}}$

10. Two complementary angles are  $X^\circ$  and  $(x+40^\circ)$ , find the value of X.

11. Work out:  $-3 + 5$  using a number line below.



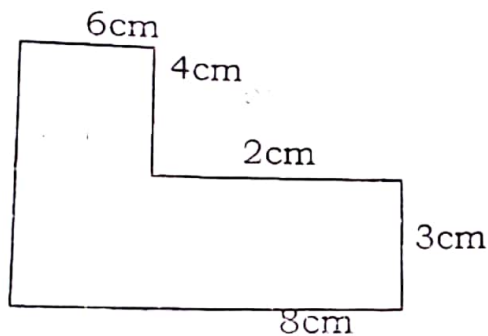
12. Trees were planted along a straight line 305 metres long. If the trees were planted 5 metres apart, how many trees were planted along the road?

13. Write 75612 in expanded form using power of ten.

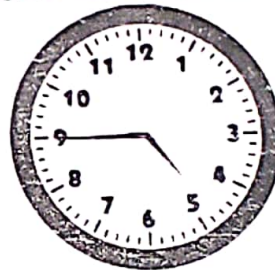
14. Find the next number in the sequence.

72, 70, 73, 68, 75, \_\_\_\_\_

15. Find the perimeter of the figure below.



16. Write the afternoon time shown in 24 hour clock system.



17. Given that  $a = 2$ ,  $b = 3$  and  $c = -5$ . Evaluate  $ab - c$

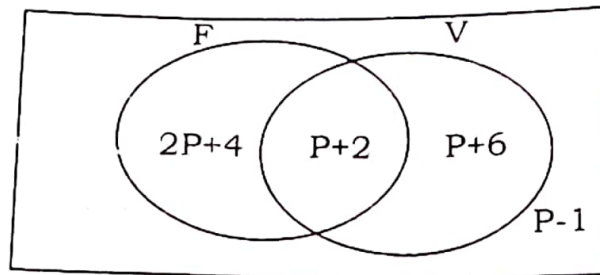
18. By selling a pressure lamp for sh.33000, a trader makes a profit of 10%. At what price did the trader buy the pressure lamp?

19. Solve for K:  $3k - 4 = 3$  (finite 5).

20. Increase sh.30000 in the ratio of 3:2.

**SECTION B (60 MARKS)**

21. On a Sport Day, two games, Football (F) and Volleyball(V), were played as shown on the venn diagram below. Study and use it to answer questions that follow.



- a. If 24 players participated in volley ball, find the value of P. (3mks)
- b. Find the probability that a player picked at random to be the best was a footballer? (02 mks)

22. Workout: 
$$\frac{1.2 \times 2.7}{0.03 \times 0.6}$$

(3 mks)

- b. Express 0.25 as a fraction in its lowest term. (2mks)

23. The parish chief had money for PDM in his bag as shown on the table below.

Denomination	Number of notes	Amount
Sh. 20000	20	Sh. _____
Sh. 50000	_____	Sh. 600,000
Sh. _____	15	Sh. 150,000
Sh. 5000	_____	Sh. _____
Total amount		Sh. 1,350,000

- a. Complete the above table. (5 mks)

24. The Budaka Local Government distributed a certain number of desks to 3 Schools: Budaka FHP, Bulumba P/S and Namengo Girls in the ratio of 3:4:5 respectively. If Bulumba P/S got 48 desks, how many desks were shared altogether? (3 mks)

- b. If each desk costs sh. 40000, how much did the district spend on desks altogether? (2 mks)

25. a. Using a ruler, a sharp pencil, and a pair of compasses only, construct a parallelogram ABCD where  $AB = 7\text{cm}$ ,  $\angle ABC = 120^\circ$  and line  $BC = 6\text{cm}$ . (4 mks)



b. Measure diagonal AC = \_\_\_\_\_ cm.

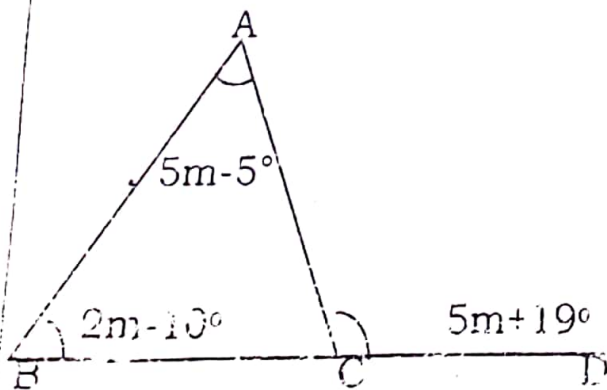
26. The time table below shows the journey of YY Coach bus from Kampala to Mbale.

Town	Arrival Time	Departure
Kampala		10:30am
Mukono	11:30am	11:35am
Jinja	12:35am	12:45pm
Iganga	1:25pm	01:30pm
Mbale	3:30pm	

- a. How long does the bus take to travel from Jinja to Iganga?
- b. What is the total time taken by a bus from Kampala to Mbale?
- c. Calculate the average speed of the whole journey if the distance from Kampala to Mbale is 300km.

27. The figure below is a triangle ABC. Study it carefully and answer the questions that follow

a) Find the value of m (2 mks)



b) Calculate the size of angle ACE.

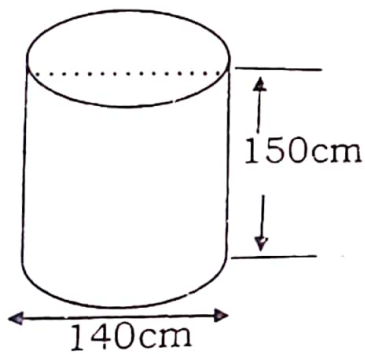
28. a) Solve the inequality and write the solution set.  
 $2 - 3K \geq 11$

b) Simplify  $\frac{48K^4 \times 9K^2 \times K^0}{24K^2 \times 3K^1}$

(2 mks)

29. The figure below is a cylindrical metallic tank of height 150cm and diameter 140cm .

- a. Calculate its volume (Take  $\pi = \frac{22}{7}$  )



- b. What is its capacity?

(02mks)

- a. The sum of three consecutive even numbers is 48. Find the numbers. (03mks)

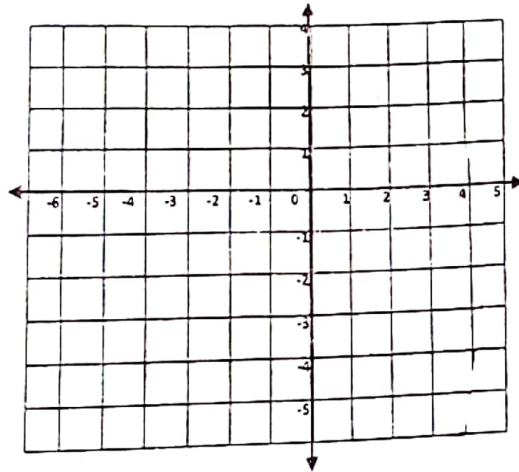
b. Work out  $3^2 + 4^0 - 5^0$

(02mks)

31. James is 3 times as old as Ronald. The product of their age is 75 years.  
a) How old is Ronald? (3 mks)

b) How old will James be in 5 years time? (2 mks)

32. On the grid below.  
a. Plot point A(2, -4), B(-2, 4), C(2, 4) and D(-2, 0) (4 mks)



b. Join A to B, B to C, C to D and D to C. (01 mk)

c. Find the area of the figure formed. (01 mk)

END