



**PAKWACH DISTRICT PRIMARY SCHOOLS
ACADEMIC COMMITTEE**

PRIMARY SEVEN DISTRICT MOCK 2024

MATHEMATICS

TIME ALLOWED: 2 HOURS 30 MINS

INDEX NO:

RANDOM NUMBER						PERSONAL NO		

CANDIDATE'S NAME:

CANDIDATE'S SIGNATURE:

SCHOOL:

SUB-COUNTY / TOWN COUNCIL:

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO

Read the following instructions carefully:

INSTRUCTIONS

1. This paper has **two** sections: **A** and **B**.
2. Section **A**, has 20 questions (40 marks).
3. Section **B** has 12 questions (60 marks).
4. All answers must be written using blue or black pen
5. Unnecessary crossings or changes may lead to loss of marks
6. Any handwriting that can not be easily read may lead to loss of marks.
7. Do not fill anything in the boxes indicated for examiners use only.
8. The use of mathematical tables and electronic calculators is not allowed.

FOR EXAMINERS' USE ONLY		
QNS	EXAMINERS MARKS	EXAMINERS INITIALS
1-5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

SECTION: A (40 MARKS)

1. Workout: $127 + 143$

2. Given that $Z = \{\text{all prime numbers less than } 10\}$

Find the number of proper sub sets in set Z.

3. Change 250 millilitres to litres.

4. Find the value of angle marked K in degrees.



5. Given that set $A = \{a, b, c, d, e, f, g\}$ and set $B = \{a, e, i, o, u\}$ Find $n(A \cup B)$

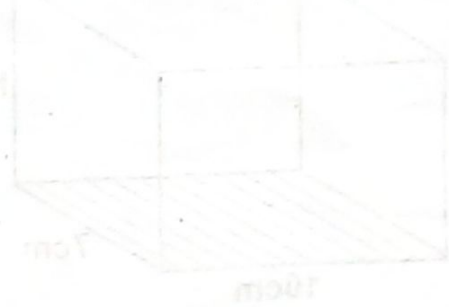
6. 4 men can dig a garden in 12 days when working at the same rate. How long will 8 men take to dig the same garden?

7. Zadox borrowed Sh. 120,000 from post bank for 6 month at an interest of 10% per month. How much interest will he pay?

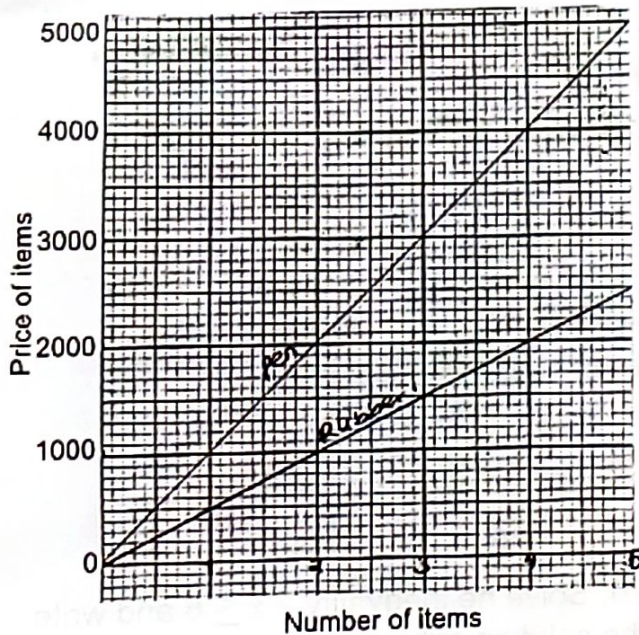
8. The Lowest Common Multiple (LCM) of two numbers is 72, their Greatest Common Factor (GCF) is 12. One of the numbers 36. Find the second number.

9. Using ruler, pencil and pair of compasses only construct an angle of 105° .

11. Mathematics lesson that took 40 minutes ended at 10:30am. Express the starting time in 24 hour clock.



10. The graph below shows the cost of pens and rubber at a certain book shop. Use it to answer the question that follow.



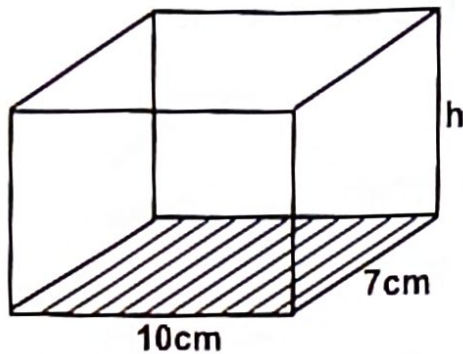
Marion bought 3 pens and 4 rubber. How much will she pay altogether?

12. The following marks were scored in Mathematics test;

60%, 80%, 60%, 80%, 70%, 65%, 60%
Find the modal frequency of the mark.

13. Work out -2×3 using numberline.

14. The volume of the figure below is 560cm^3 . Find its height.



15. The average weight of 4 girls is 24kg when one girl leaves the group, the average weight become 20kg. Find the weight of the girl that left the group.

16. Write 6,790,403 in words.

17. Work out $1101_{\text{two}} \times 11_{\text{two}}$

18. Solve for r : $r + 4 = 2$ (finite 7)

19. Write 1470 in scientific notation.

20. Solve the inequality $2x \leq 6$ and write the solution set.

SECTION: B (60 MARKS)

21.a) Work out $114_{\text{five}} + 123_{\text{five}}$

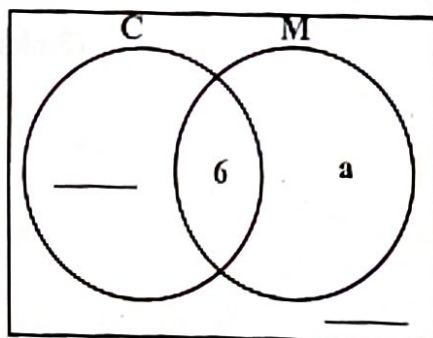
(2mks)

b) Solve for t. $14_t = 1001_{\text{five}}$

(3mks)

22. In a village, 6 farmers grow both cassava (C) and maize (M), 27 farmers grow cassava, a farmer grows maize only and $2a + 12$ farmers grow none of the two crops.

a) Complete the venn diagram below.



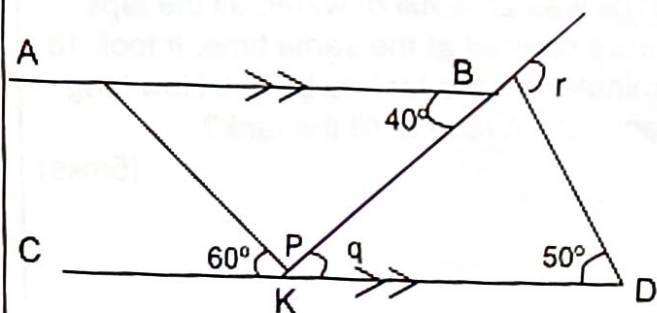
b) Given that the number of farmers who grow one type of crop is equal to number of farmers who grow none of the crops. Find the value of a.

(2mks)

c) How many farmers grow maize.

(1mk)

23. In the figure below line AB is parallel to CD. $\angle AKC = 60^\circ$, $\angle BDK = 50^\circ$. Use it to answer the questions that follow.



a) Find the angle marked P.

(2mks)

b) Find the angle marked r.

(3mks)

25.a) Work out: $2 - 4 = \underline{\hspace{2cm}}$ (finite 5)
(2mks)

24. Two taps A and B were connected to a water tank. Tap A took K minutes to fill the tank, tap B took 16 minutes to draw water from the tank. One day when the tank was 25% full of water, all the taps were opened at the same time. It took 18 minutes for the tank to be full. How long does tap A take to fill the tank?

(5mks)

b) If today is Thursday 13th June, What day of the week will it be 4th August the same year?

(3mks)

26. Complete the shopping bill below.

Item	quantity	unit cost	amount
Sugar	__kg	Sh. 400per kg	Sh. 12,000
Rice	4kg	Sh. __perkg	Sh. 14,400
Cooking oil	1½litres	Sh. 6400 per litre	Sh. ____
Banana	____ bunch	Sh. 7000	Sh. ____
TOTAL			SH. 50,0000

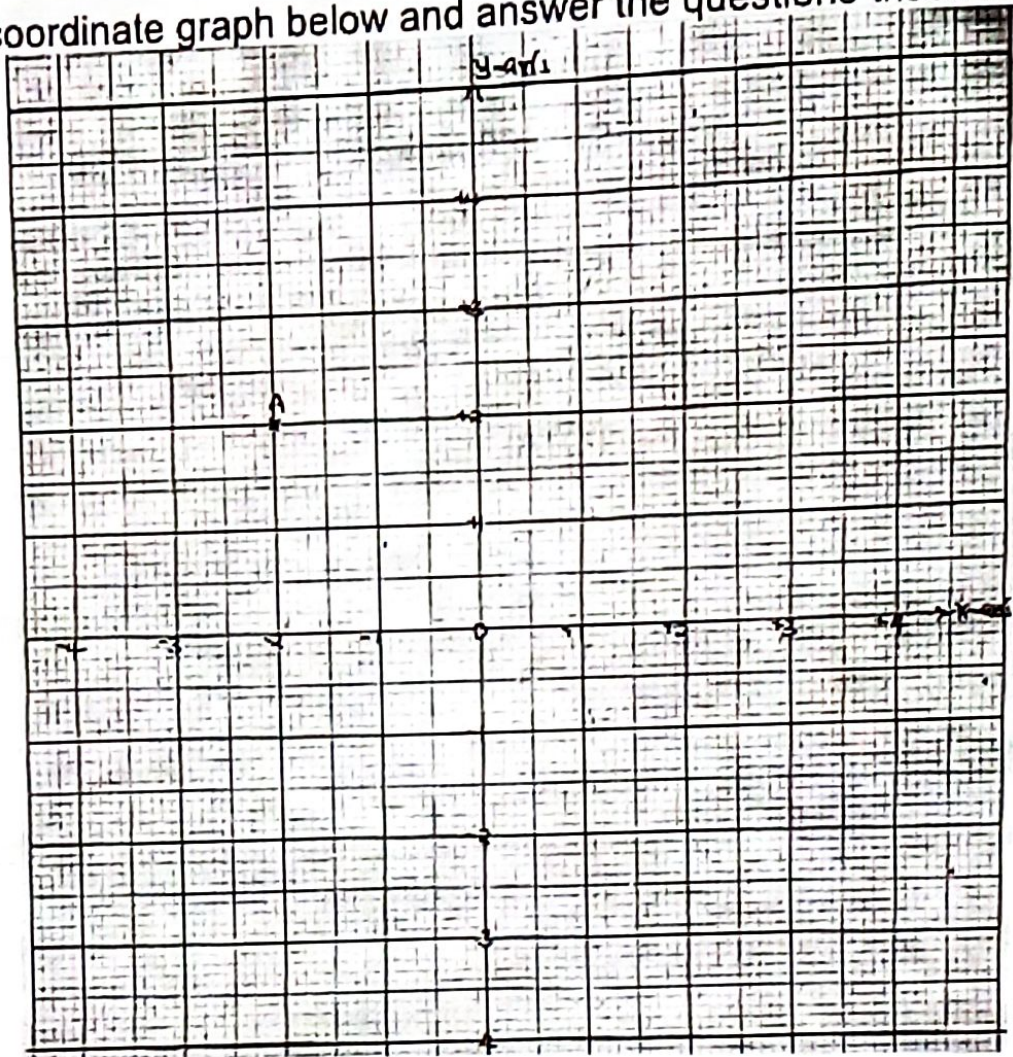
(5mks)

27.a) Using a ruler, pencil and a apir of compasses only, construct a quadrilateral. KLMN where $\overline{KL} = 6\text{cm}$, $\angle MKL = 60^\circ$, $\angle KLN = 120^\circ$ $\overline{KM} = \overline{NL} = 4\text{cm}$

(4mks)

b) Measure the diagonal ML. (1mk)

28. Study the coordinate graph below and answer the questions that follow.

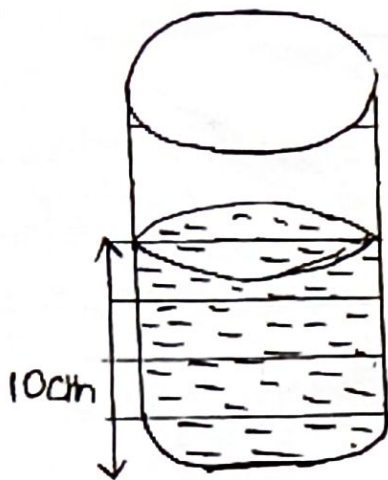


i) Write the coordinate of point A. (1mk)

ii) Plot point B(+1, +2) (+4, -1) on the graph. (2mks)

iii) Locate point D on the graph such that ABCD when joined is the trapezium. (1mk)

29. The figure below is a cylindrical tank containing 154 litres of water.



- a) Find the radius of the tank.
(Use $\pi = \frac{22}{7}$)

(3mks)

- b) If the tank is $\frac{2}{3}$ full of water. Find its capacity.

(2mks)

30. Okello is 3 times as old as the daughter, in 10 years time, their total age will be 60 years.

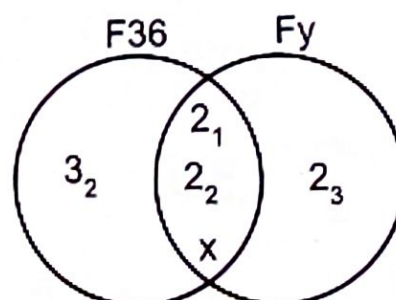
- a) How old is Okello now?

(3mks)

- b) How old will his daughter be in 10 years.

(2mks)

31. Use the venn diagram below to answer questions that follow.



a) Find the value of;

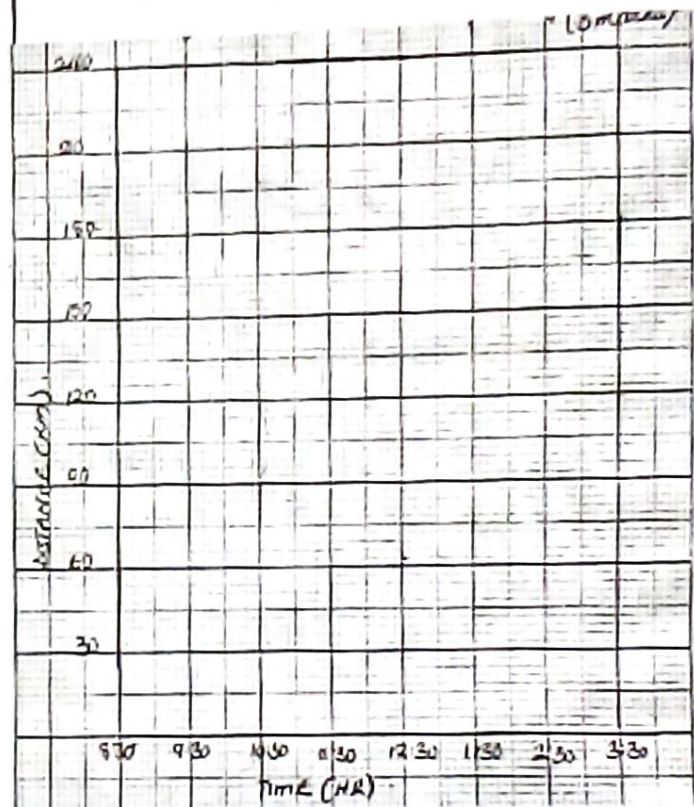
i) x

(2mks)

32. Town Z is 240km away from town Y. Edina started her journey at 8:30am travelling at a steady speed of 30km/hr for 2 hours. She rested for 30 minutes and then continued at a steady speed of 60km/h to town Y.

a) Draw travel graph to show Edina's journey.

(3mks)



ii) y

(2mks)

b) Find the LCM of 36 and y .

(2mks)

b) Calculate Edina's average speed for the whole journey.

(2mks)

END