

MUKONO DISTRICT MOCK 2023

MATHEMATICS

DURATION: 2 HOURS 30 MINUTES

Random No.						Personal No.		

CANDIDATE'S NAME

CANDIDATE'S SIGNATURE:

SCHOOL NAME

DISTRICT NO.

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DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
Read the following instructions carefully.

1. This paper is made up of **Two** sections: **A** and **B**.
2. Answer all questions. All questions to **both** sections **A** and **B** must be written in the spaces provided
3. ALL answers must be written in blue or Black ball-point pen or ink.
4. Unnecessary alteration of work may lead to loss of marks.
5. Any handwriting that cannot easily be read may lead to loss of marks.
6. Do not fill anything in the boxes shown "For Examiners' Use Only" and those inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn.No.	Marks	Exr's No.
1-5		
6-10		
11-15		
16-20		
21-22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

Mob: 0772 461 137

SECTION A

1. Work out:

$$\begin{array}{r} 403 \\ + 143 \\ \hline \end{array}$$

2. Write 40907 in words.

3. Express 0.05km in metres.

4. Find the value of 40 tens and 2 ones.

5. Simplify: $-8 - 4$

6. Given that set $A = \{0, 2, 4, 6, 8\}$
and set $B = \{1, 2, 3, 4, 5\}$
find $n(A - B)$

7. The median of 3 consecutive integers is -7 . Find their range.

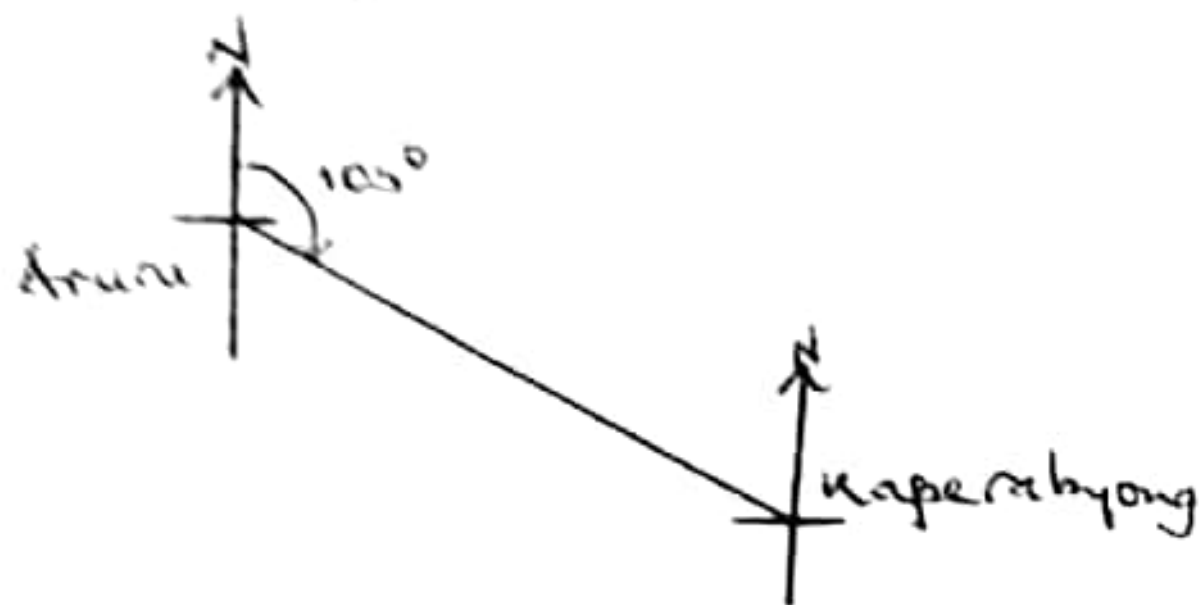
8. Workout $(142 \times 10) - (22 \times 10)$ using distributive property.

9. Find the least number of apples that can be equally shared by either 9 or 12 pupils leaving a remainder of 4 apples.

10. Seven pens cost shs. 35,000. How many more pens will shs. 65,000 buy?

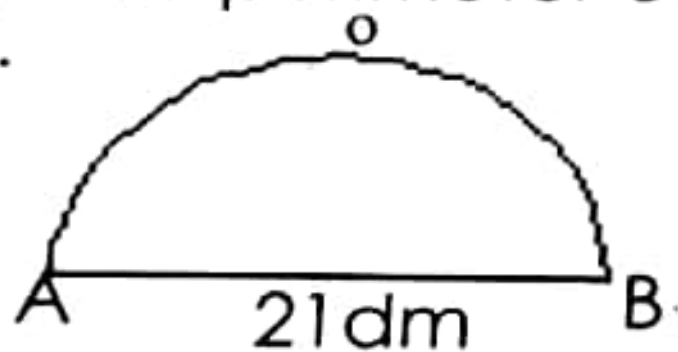
11. Workout: $y - 4 = 1 \pmod{6}$

12. In the diagram below, Find the bearing of Aruru from Kaperabyong.



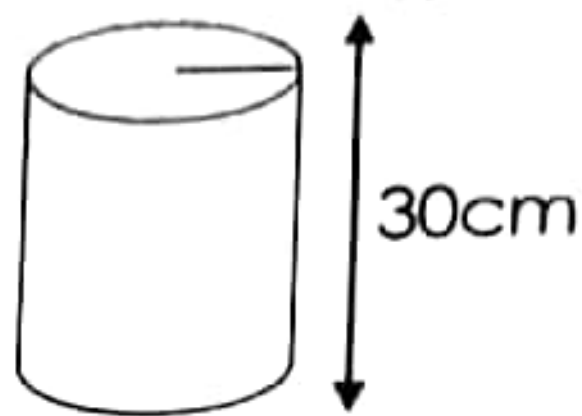
13. Change 101_{two} to base ten.

14. Find the perimeter of the figure below.

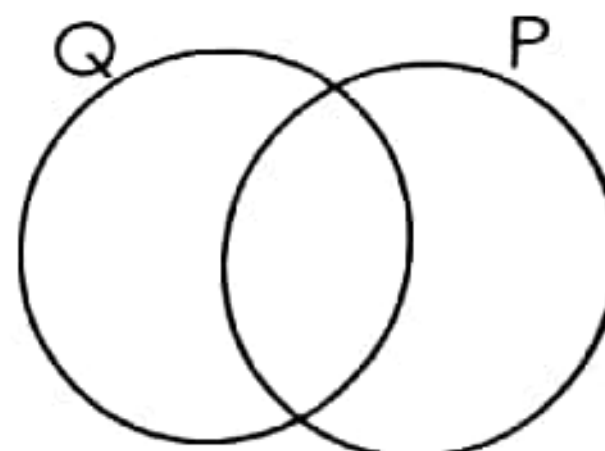


15. What is $12\frac{1}{2}\%$ of 400 bags of cement?

16. Find the volume of the cylinder below. ($\pi = \frac{22}{7}$)



17. Shade P - Q in the diagram below.



18. Given that $a = \frac{1}{2}$, $b = \frac{1}{3}$ and $c = \frac{1}{4}$ Find the value of $a + b - c$

19. A car moved a distance of 30km in $2\frac{1}{2}$ hours. Calculate the average speed in km/hr.

20. **Solve:** $3^y + 3^1 = 81$

SECTION B

21. **Workout:** a) $\frac{0.39 \times 0.24}{1.3 \times 0.08}$

(2mks)

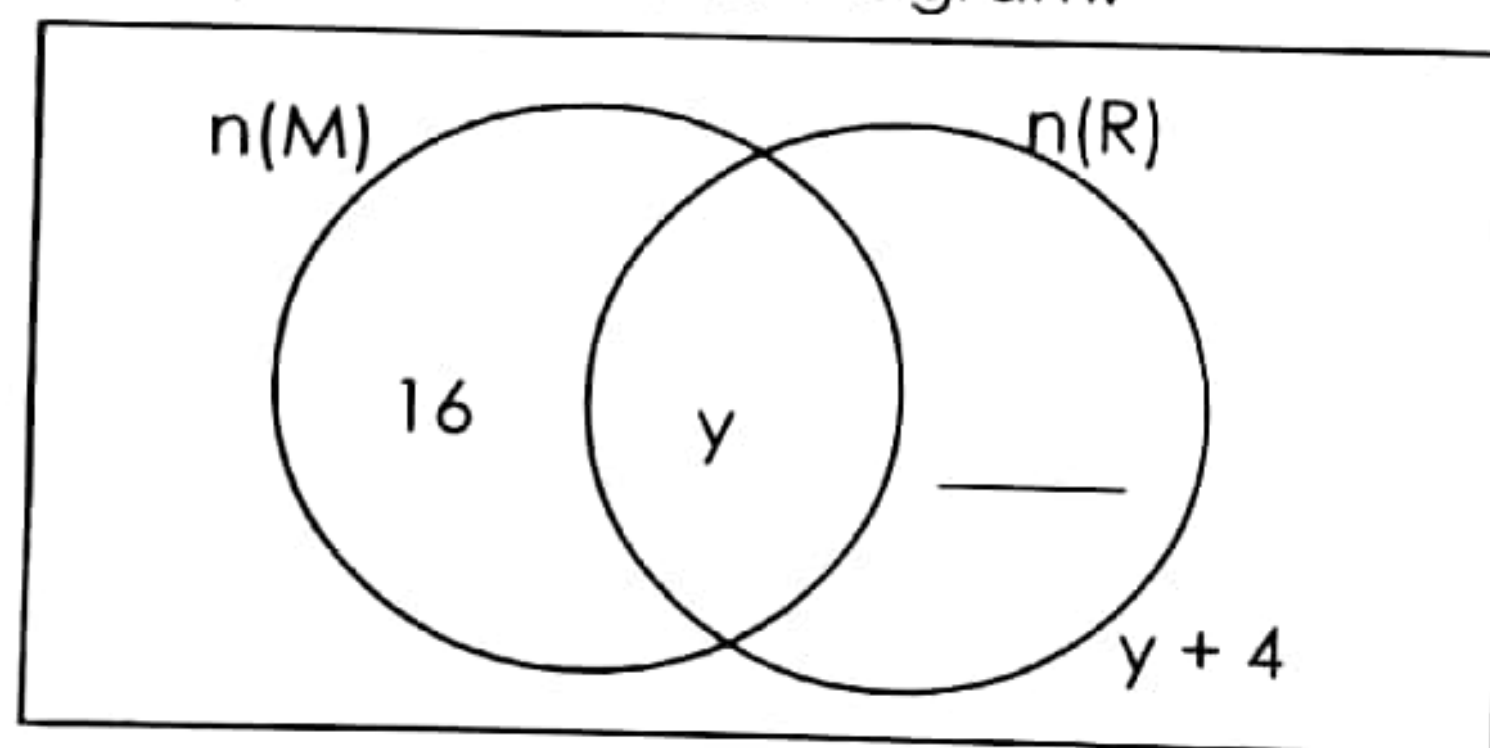
b) Kato bought a bicycle at shs. 500,000 and later sold it to Mugerwa at a loss of 20%. Mugerwa sold it to Wabwire at a profit of 10%. How much did Wabwire pay for the bicycle?

(4mks)

22. At a party, $(y + 15)$ pupils ate Rice (R), y pupils ate both Rice and Matooke (M), 16 pupils ate Matooke only and $(y + 4)$ pupils did not eat any of the two foods.

a) Complete the venn diagram.

(2mks)



b) Given that 30 pupils did not eat Rice, find the value of y . (2mks)

c) How many pupils attended the party? (2mks)

23. Given the digits 4, 0 and 6.

a) Form the largest 3 digits.

(1mk)

b) Write the number formed above in;

i) Roman numerals (2mks)

ii) Standard form

(2mks)

24. A rectangular school garden measuring 50m by 45m was fenced using poles fixed at intervals of 5m each.

a) How many poles were used to fence the whole garden? (3mks)

b) If each pole costs shs. 3000, how much money did the school pay for the poles? (2mks)

25. a) Using a ruler, a pencil, and a pair of compasses only, construct a rhombus PQRS where $PQ = 6\text{cm}$ and angle $SPQ = 60^\circ$ (4mks)

b) Measure diagonal PR in cm. (1mk)

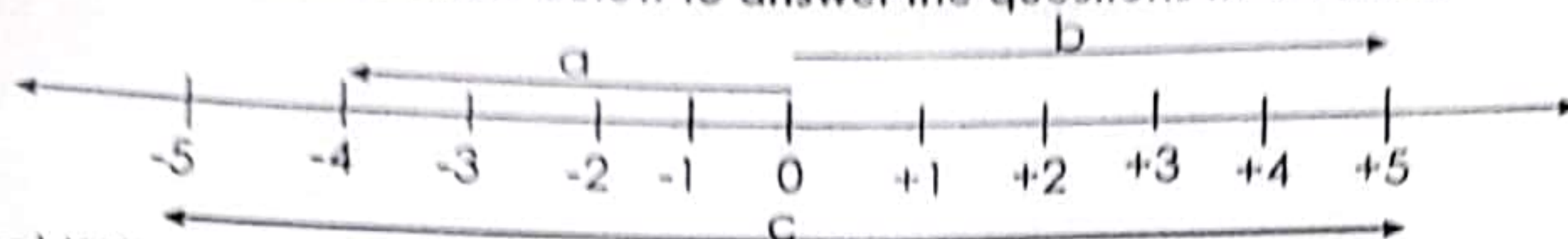
26. A farmer harvested 300bags of beans each weighing 100kg.
a) How many tonnes of beans did he harvest? (3mks)

b) If he hired a vehicle which carries 3 tonnes per trip, how many trips did he make to transport all the beans from his home to the market? (1mk)

27.a) **Solve;** $4(m+2) - (m-3) = 44$ (3mks)

b) Solve and find the solution set for $3-2y > 9$ (3mks)

28. Use the numberline below to answer the questions that follow.



a) Write the integers represented by arrows: (1mk @)

a= _____ b= _____ c= _____

b) Write a mathematical sentence of the above numberline. (2mks)

29. At Bimwo Forex Bureau, the cost of one US dollar is Ug.shs. 3600 and that of Kenya shillings is UgShs. 30. A tourist had US dollar 240. How much money in Kenya shillings did he have? (4mks)

30. a) Express 72km/hr to m/sec. (2 mks)

b) Convert 0036 hours to 12 hours clock system. (1mk)

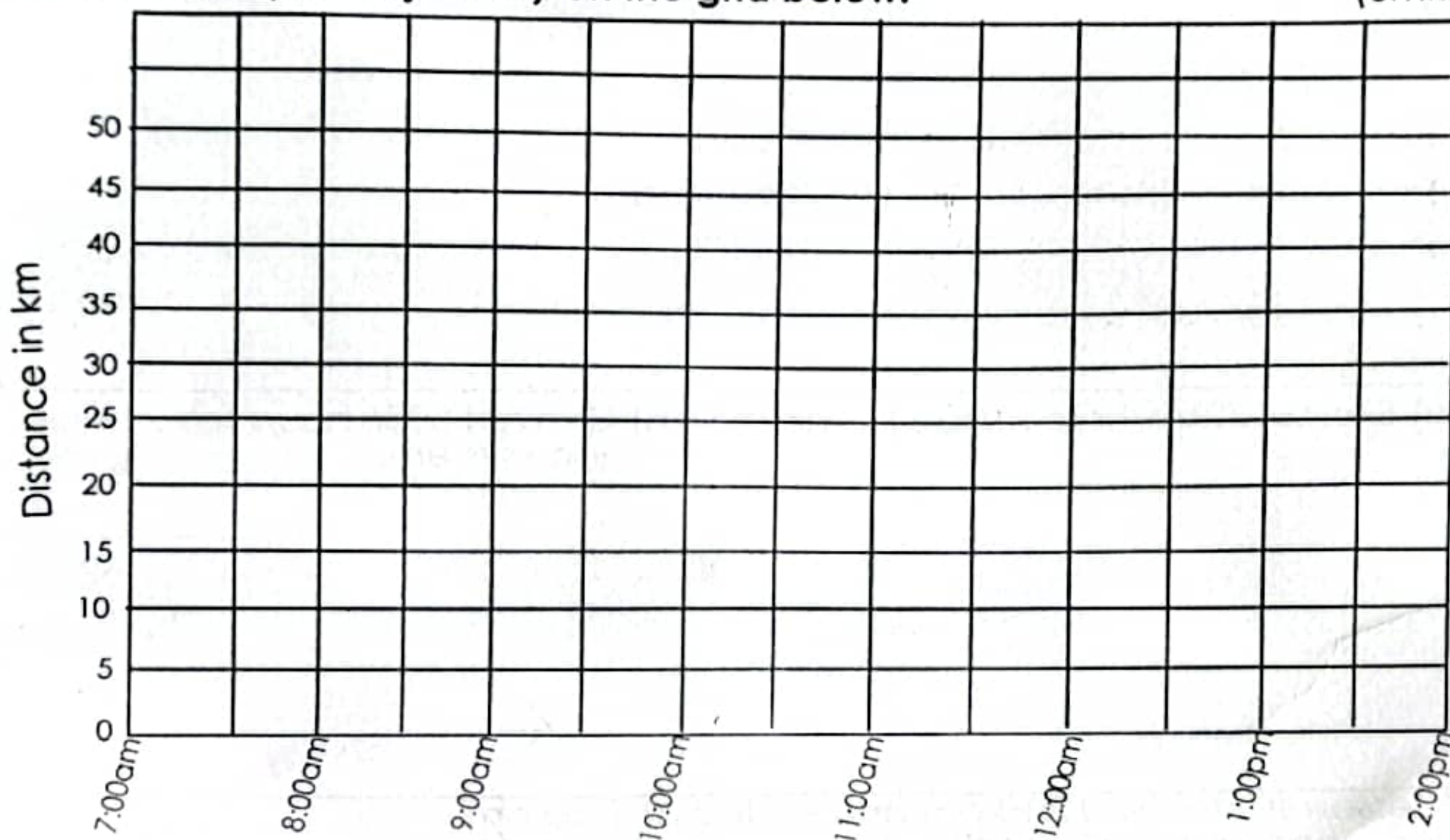
c) A lesson started at 12:10 pm and ended at 1: 50 pm.
How long was the lesson? (2mks)

31. a) The sum of 3 consecutive odd numbers is 45. If the second number is n , find the number. (3mks)

b) Workout the product of the smallest and the largest two numbers. (2mks)

32. A motor-cycle left Mukono at 7:00 am and rode to Lugazi town at a speed of 10km/hr for 2 hours. He rested at Lugazi for 30 minutes and then continued to Jinja at a speed of 30km/hr for 1 hour. After 30 minutes rest at Jinja, he rode back to Mukono at a steady speed of 25km/hr.

a) Show the cyclist's journey on the grid below. (3mks)



b) Calculate the cyclist's average speed while travelling. (2mks)