

SEMBABULE DISTRICT ACADEMIC BOARD
MOCK EXAMINATION - 2024
P.7 MATHEMATICS
DURATION: 2 HOURS 30 MINUTES

Random number						Personal No.		

Candidates Name: _____

Candidates' Signature: _____

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

READ THE FOLLOWING INSTRUCTIONS

1. This paper has two sections A and B.
2. Section A, has 20 questions and B has 12 questions.
3. Answer **all** questions. All the working for both section A and B must be shown in the spaces provided.
4. All the working **must** be done using a blue or **black** ball point pen or ink. Any work done by pencil other than graphs and diagram will **not** be marked.
5. No calculators are allowed in the examination room
6. Unnecessary **changes** in your work and handwriting that cannot be read easily may lead to **loss of marks**.
7. Do not fill anything in the table indicated: **"FOR EXAMINER'S USE ONLY"**

FOR EXAMINERS USE ONLY		
QN. NO.	MARK	EXR' NO.
1 – 5		
6 – 10		
11 – 15		
16 – 20		
21 – 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		
TOTAL		

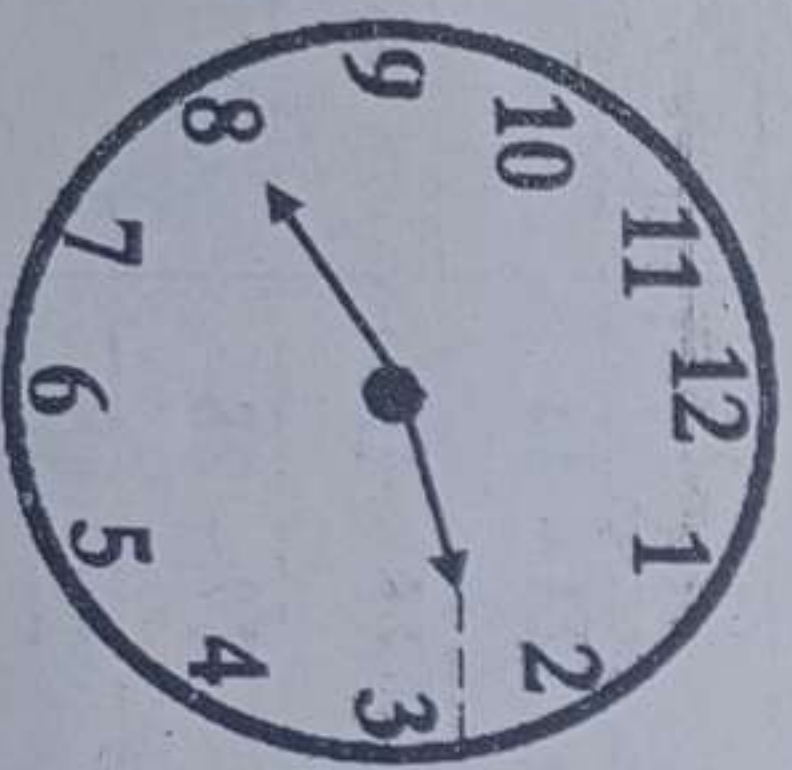
Turn over

SECTION A (40MARKS)

1. Work out: $24 + 63$
2. Write 79 in Roman numerals.
3. Given that set $Q = \{\text{all factors of } 12\}$
Find $n(Q)$

4. Write **40,032** in words

5. Express the afternoon time shown on the clock face below in 24 hours clock.



6. Work out: $-5 - -3 =$

7. Find the next number in the sequence.
58, 33, 17, 8, _____

9. Divide: $1\frac{1}{2} \div \frac{3}{4}$

9. Simplify: $3a + 2b + 4a - 5b$

10. Hakeim bought a dozen of pens at sh. 7,200. If he sold each pen at sh. 700. How much profit did he make?

11. Round-off 16,497 to the nearest thousands.

12. Musa deposited shs. 1,200,000 in a bank for 4 years and earned an interest of sh. 144,000. What was the rate of interest per annum?

13. Find the least number of oranges which when divided by either 12 girls or 15 boys leaves a remainder 5.

14. Solve: $3 + p = 2$ (finite 5)

15. Using a ruler, pencil and a pair of compasses only, construct an angle of 30° in the space below.

16. Arrange the following fractions in descending order.

$\frac{2}{3}$, $\frac{1}{4}$, $\frac{5}{6}$ and $\frac{1}{2}$

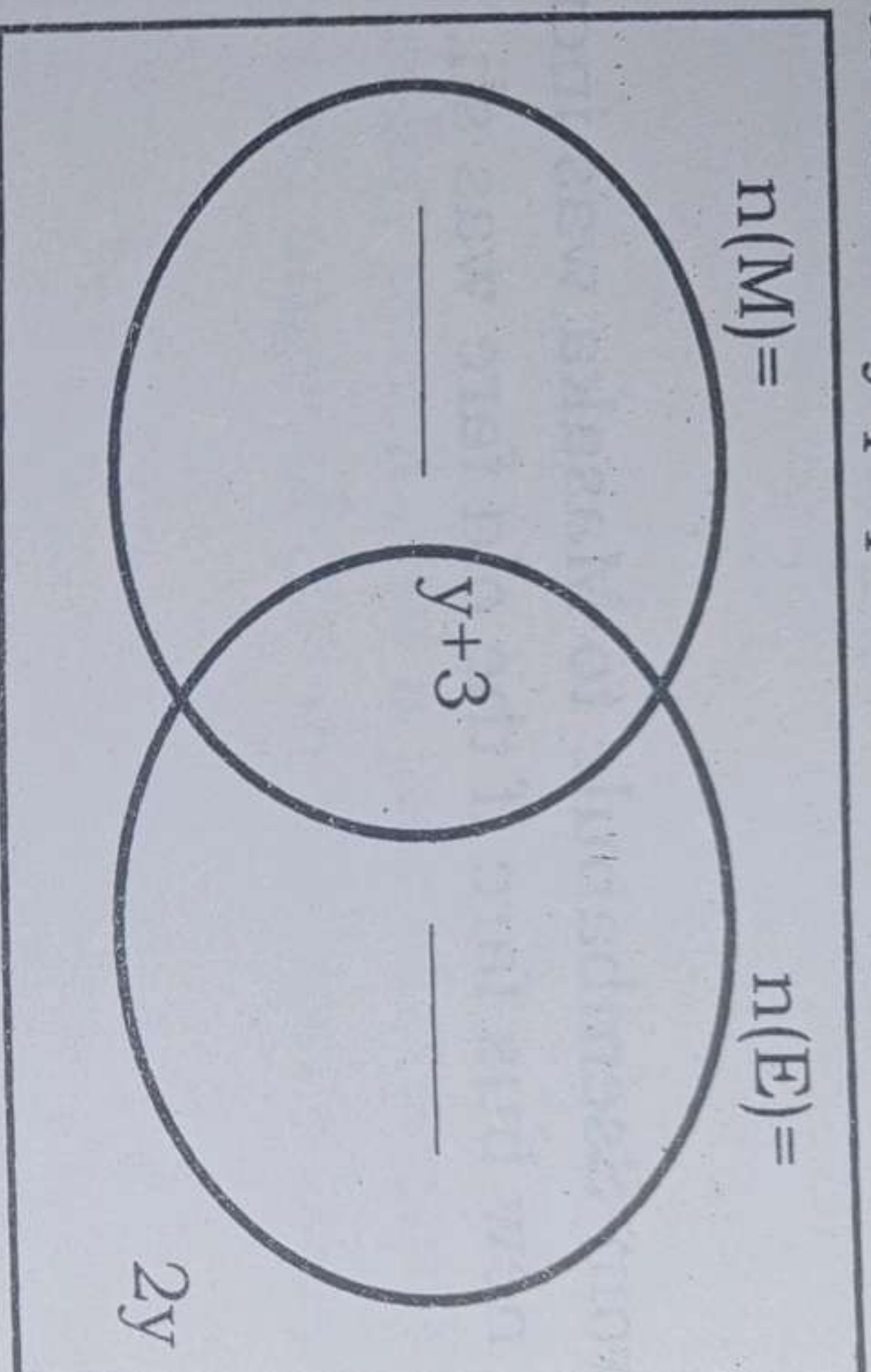
17. It started raining at 11:20am and lasted for $2\frac{1}{4}$ hours. At what time did it end?

18. Find the median of 9, 6, 12, 4, 6, 0
19. The bus fare from Ssembabule to Masaka was increased by 12%. Find the new bus fare if the old fare was sh. 8,000.
20. James is 4 times as old as John. The difference in their ages is 18 years. How old will John be in 5 years time?

SECTION B (60MARKS)

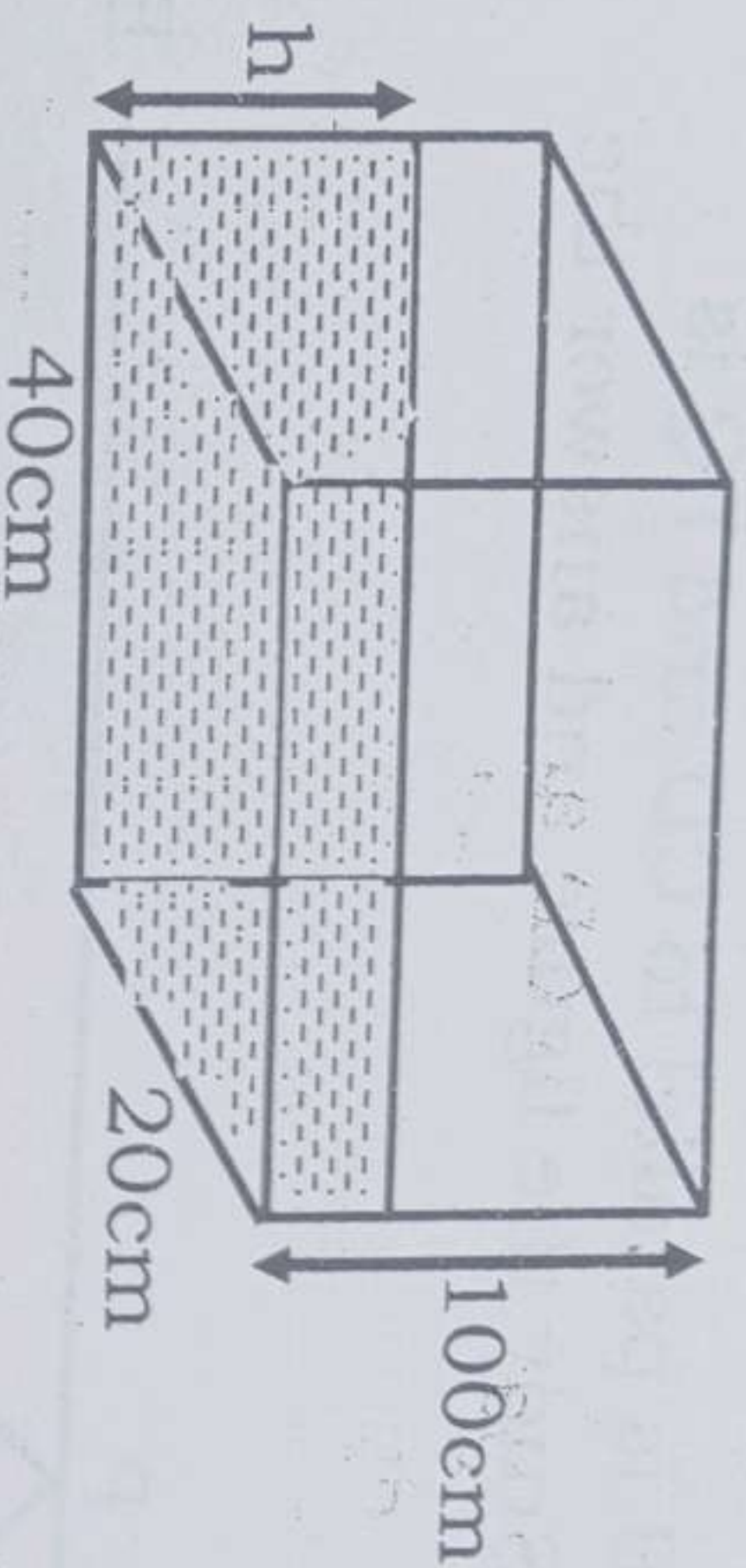
21. Paul, Justine and Lule are workers of a certain factory. They are paid the ratio of 4:2:5 respectively. If Lule is paid sh. 27,000 more than Paul. Find the amount of money spent on the three works. (4marks)

22. In a class, all pupils like Science (S). (5y-3) pupils like Mathematics (M) and Science only (2y+9) pupils like English and Science only, (y+3) pupils like all the three subjects while 2y pupils like only Science



- (b) If the number of pupils who do not like English is twice those who like both English and Science, find the value of y
23. Joyce spent $\frac{1}{3}$ of her salary on rent and $\frac{1}{4}$ of the remainder on food and she spends the rest on transport. If she spend sh. 20,000 less on transport than on rent, find her total salary. (5marks)

24. The tank below is currently holding 72 litres of fuel.



a) Find the value of h . (3marks)

b) How many litres are needed to fill the tank? (2marks)

25. John went to the shop and bought the following items below;

3kg of sugar at sh 4800 each.

4 bars of soap at sh. 16000.

$2\frac{1}{2}$ of rice at sh. 5200 a kg.

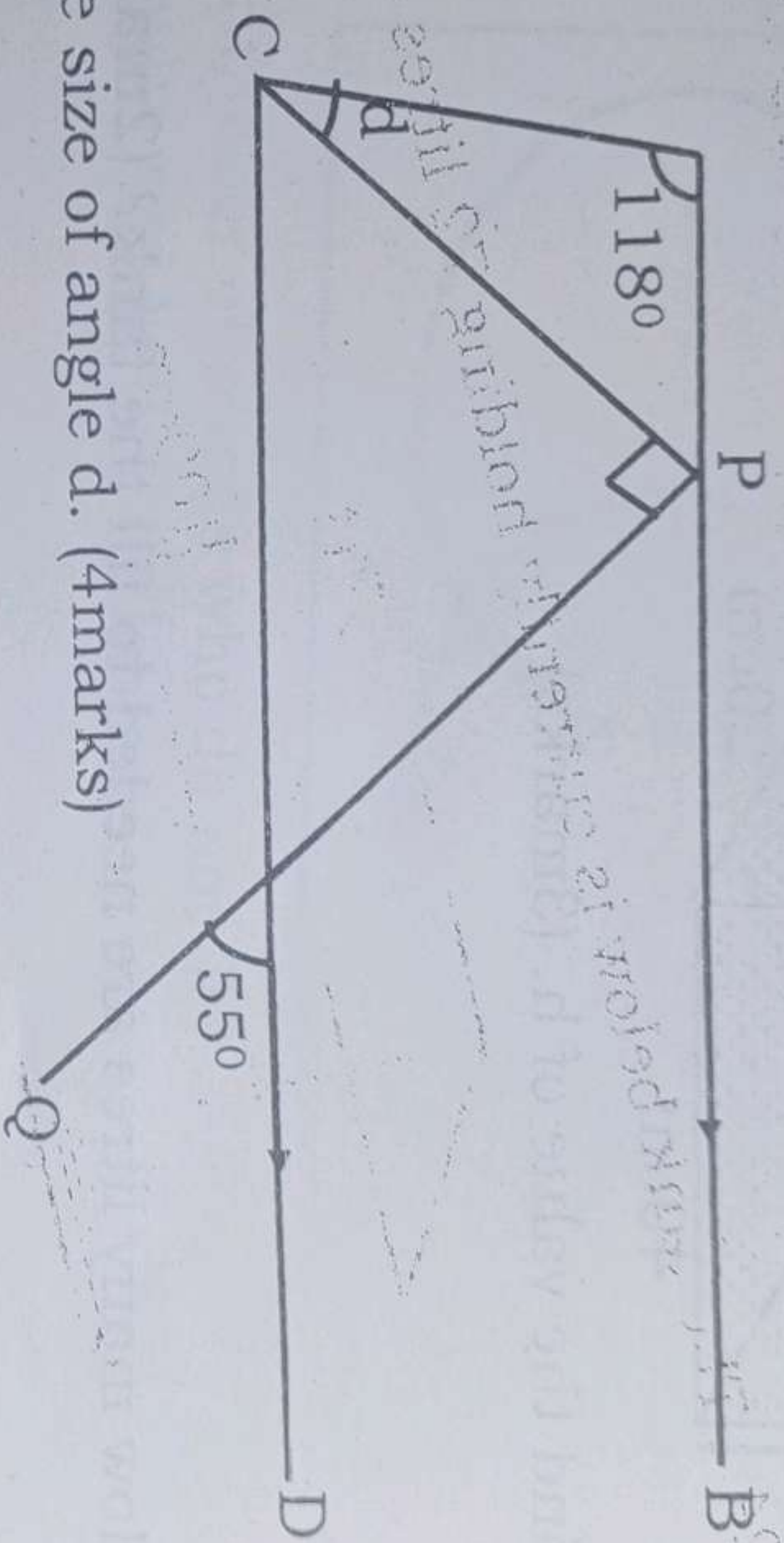
500ml of cooking oil at sh. 4800.

(a) Calculate his total expenditure. (4marks)

(b) If he went with a fifty thousand shilling note, find his change. (2marks)

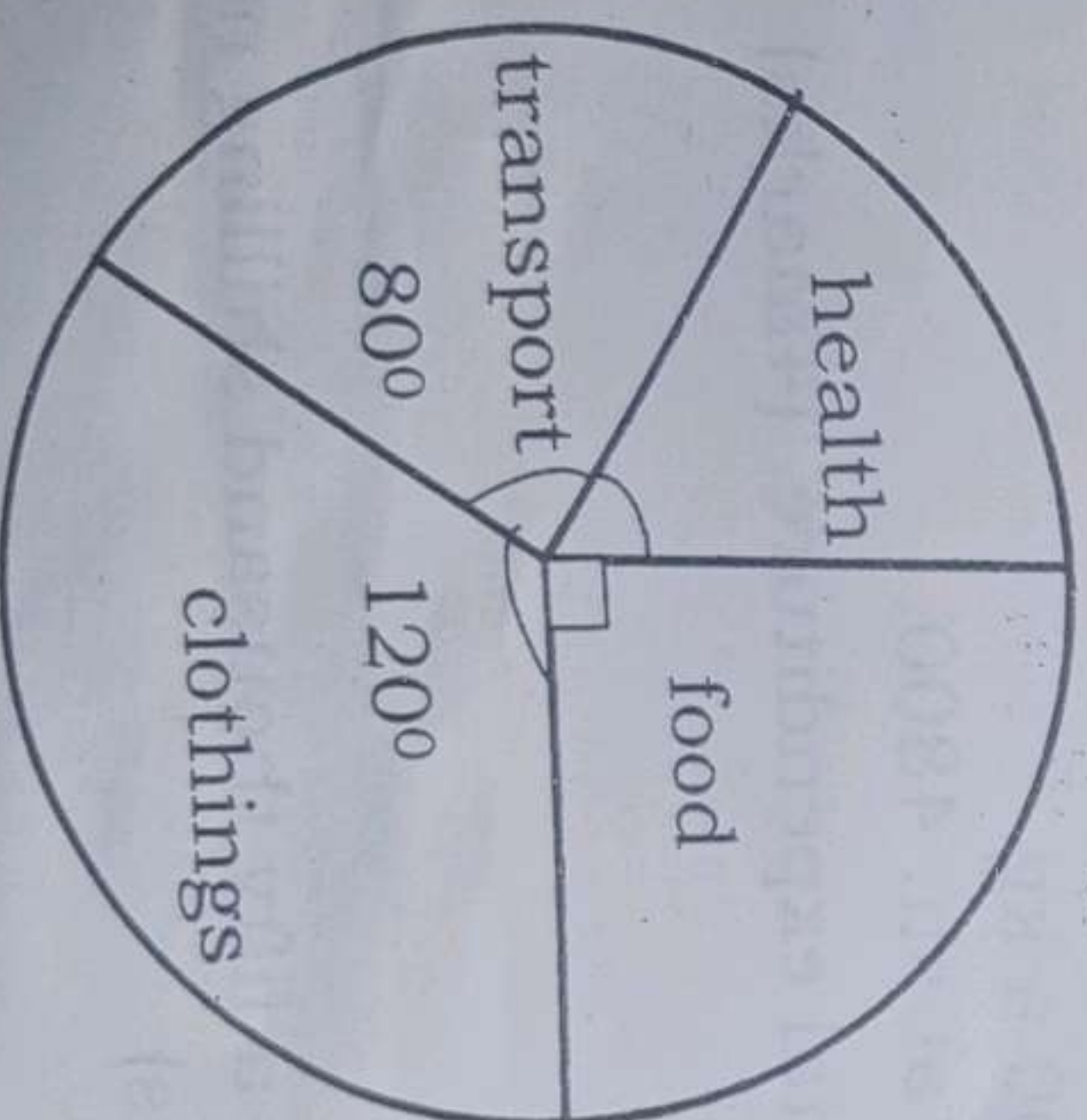
26. In the figure below, AB is parallel to CD and PQ is perpendicular to PC. Study the figure and answer the question that follows;

A



Find the size of angle d. (4marks)

27. The pie-chart below shows Joan's monthly expenditure. Study it carefully and use it to answer questions that follow;

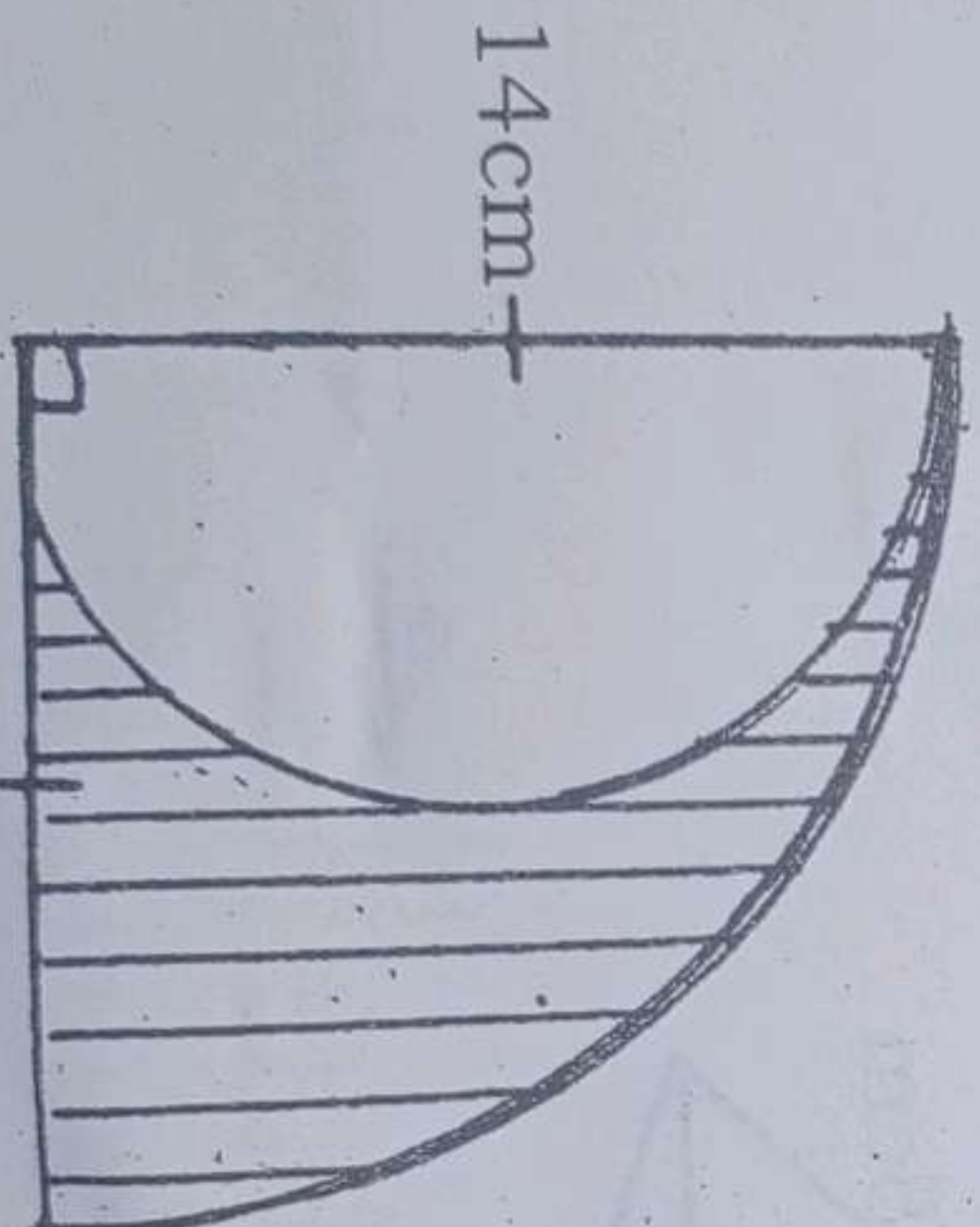


- a) Find the value of x.
(2marks)

b) If she spends sh. 420,000/= on food and clothings, how much was her monthly salary. (3marks)

28. The cost of a book is sh. 600 more than the cost of a ruler. A pen costs two-thirds of the cost of a book. The total cost of the three is sh. 9000. Find the cost of a book. (5marks)

29. Study the figure below and find the area of the shaded part. (5marks)



30. Mrs. Mukasa uses this route as shown below when going to Masaka City.

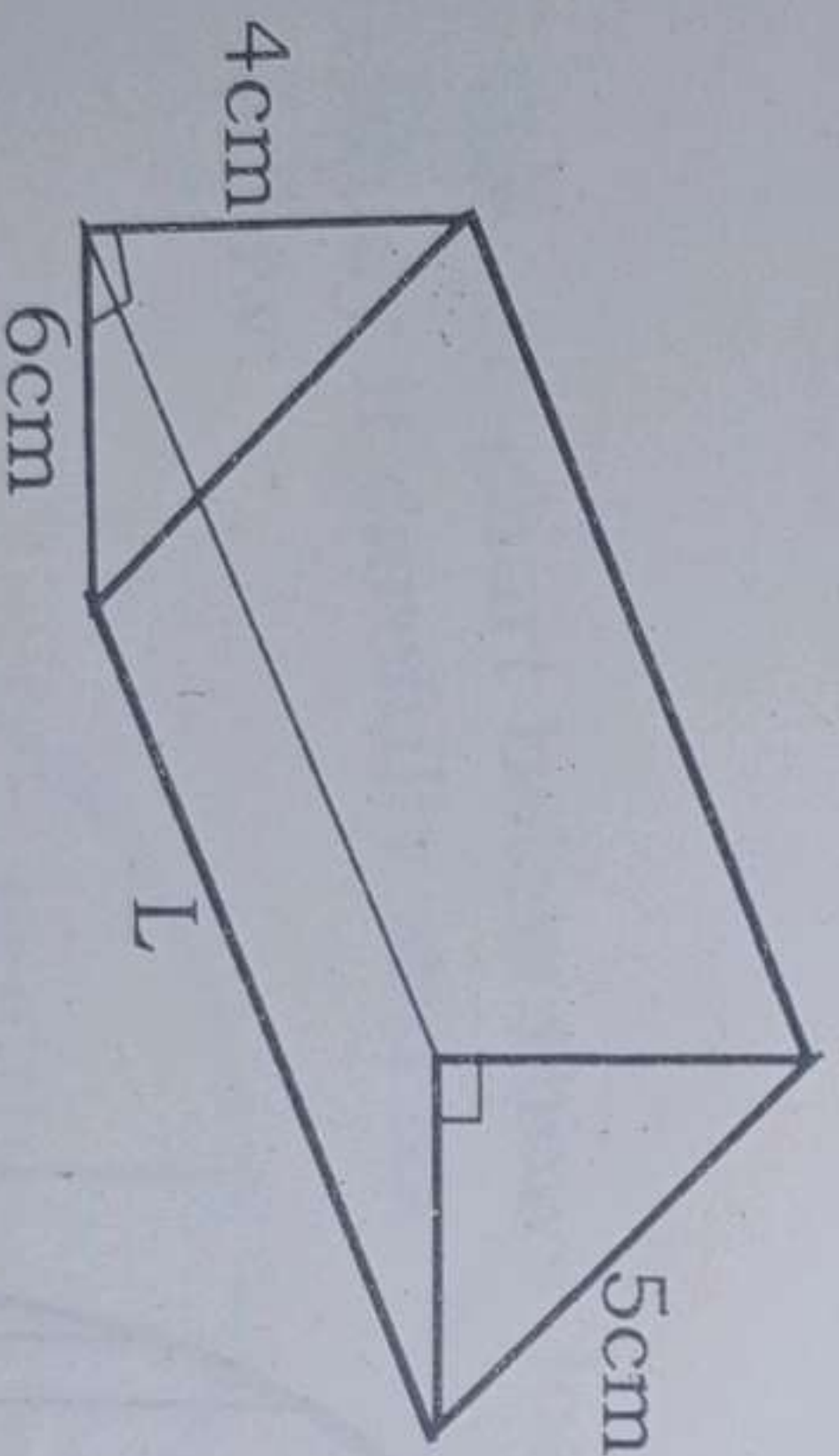
Town	Arrival time	Departure time
Lwebitakuli		10:30a.m
Mateete	11:10a.m	11:35a.m
Buyoga	12:05p.m	12:20p.m
Kyabakuza	1:05p.m	1:20p.m
Masaka	1:30p.m	

a) At what time did she arrive at Buyaga? (1mark)

b) For how long did she stay at Mateete? (1mark)

c) If she travels at a speed of 96km/h, find the distance she covered from Lwebitakuli to Masaka. (3marks)

31. The sum of all edges of the prism below is 57cm.



a) Find the length L. (2marks)

b) Calculate its volume. (3marks)

32. A boat man sailed from port A to port B on a bearing of 120° a distance of 54km. he then continued to port C a distance of 60km on a bearing of 230° .
- a) Draw a sketch distance to represent the journey. (1mark)
- b) Using a scale of 1cm to represent 10km, draw an accurate diagram for the journey. (4marks)
- c) Find the bearing of port C from port A. (1mark)

END