LIRA CITY ACADEMIC BOARD
PLE-MOCK ASSESSMENT 2024

MATHEMATICS PAPER
Time Allowed: 2 hours 30 minutes

Candidate's Name: _____

Index No : ☐☐☐☐☐☐☐☐☐

Signature : _____ District: _____

School: _____

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO
READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. The paper is made up of **two** sections: A & B.

2. Section A has **20** questions **(40 marks)**

3. Section B has **12** questions **(60 marks)**

4. Answer **ALL** questions in both sections A & B

5. All answers must be written in the spaces provided in **BLUE** or **BLACK** ink. Only diagrams should be drawn in pencil.

6. **Unnecessary crossing** of work will lead to **loss of marks.**

7. **Poor handwriting**, which cannot be easily read may lead to **loss of marks.**

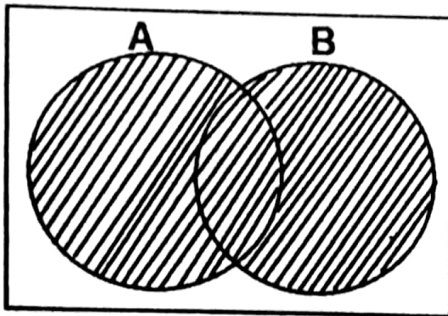8. Do not fill anything in the boxes shown

FOR EXAMINERS' USE ONLY

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

1. **Work out:** $404 \div 4$

2. Write "One hundred four thousandths in figures."
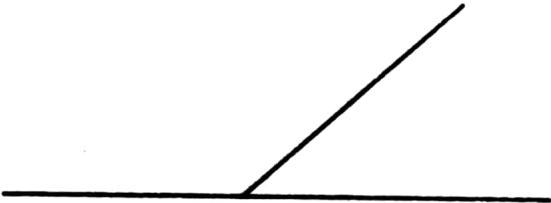
3. Describe the unshaded part in the diagram below.

4. Subtract: $2K - 4$ from $6K - 8$.

5. Find the next numbers in the sequence.

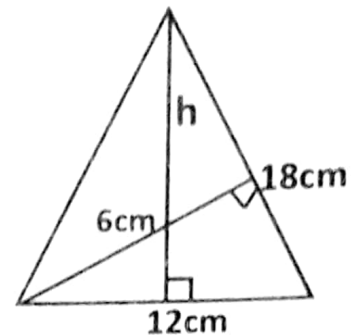$\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \frac{1}{6}$ _____, _____.

6. A meeting which started at 11:30am ended at 1:15pm. How long was the meeting?

7.	Workout the median of $\frac{1}{2}, \frac{1}{12}, \frac{1}{6}$ and $\frac{1}{3}$.	8.	A pack of juice is 250ml. Find the total number of litres in 60 packs of juice.
9.	In the diagram below, bisect an obtuse angle.	10.	Without dividing, show that 468 is divisible by 6.
11.	Expand 216.148 using powers of 10.	12.	A man who died in 45AD was 65 years old. When was he born?

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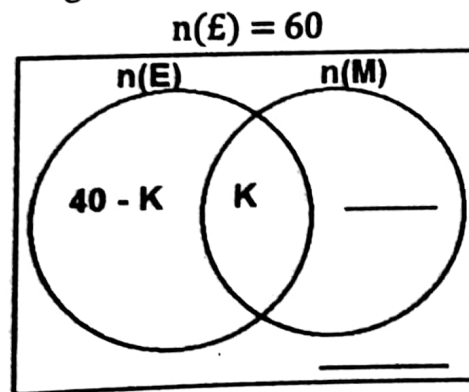|			
13.	Subtract $132_{four} - 33_{four}$.	14.	Round off 715.284 to the nearest whole number.
15.	A motorist covered 60km in 30minutes. Workout his speed in km/hr.	16.	At a forex bureau, 1ksh = ugsh.30 and 1US dollar = ugsh.3,900. A radio cost Ksh.5,200. Find the cost of the radio in US dollar.
17.	The bearing of Lira from Kwania is 130^0. What is the bearing of Kwania from Lira?	18.	5kg of beans is eaten by 30 pupils in a day. How many pupils will eat 50kg of beans in a day?

19. List the solution sets for K. $3-3K<12$.

20. Using the diagram below, find the value of h.

6cm, 18cm, 12cm, h

SECTION B (60 marks)

21. In a class of 60 pupils, 40 pupils like English (E). $\frac{1}{4}$ of the pupils who like English like Mathematics only. K like both subjects and and (2K-10) do not like any of the two subsets.
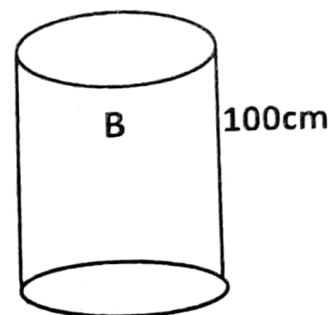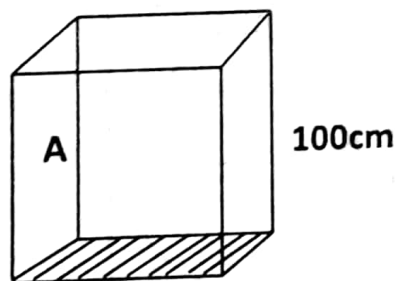
a) Complete the venn diagram. **(2 marks)**

$n(£) = 60$

n(E)   n(M)

40 - K   K   _____

b) Find the number of pupils who like none of the subjects. **(4marks)**

22.	a) Express 2.66.............. as a rational number.	(3marks)
b)	Evaluate: $\dfrac{0.24 \times 3.6}{0.12+0.36}$	(2marks)
23.	Two tanks **A** and **B** below carry the same amount of water when completely full of water. The area of shaded part of tank A is 154cm². Find the diameter of tank B.	(4marks)

Two tanks **A** and **B** below carry the same amount of water when completely full of water. The area of shaded part of tank A is 154cm².

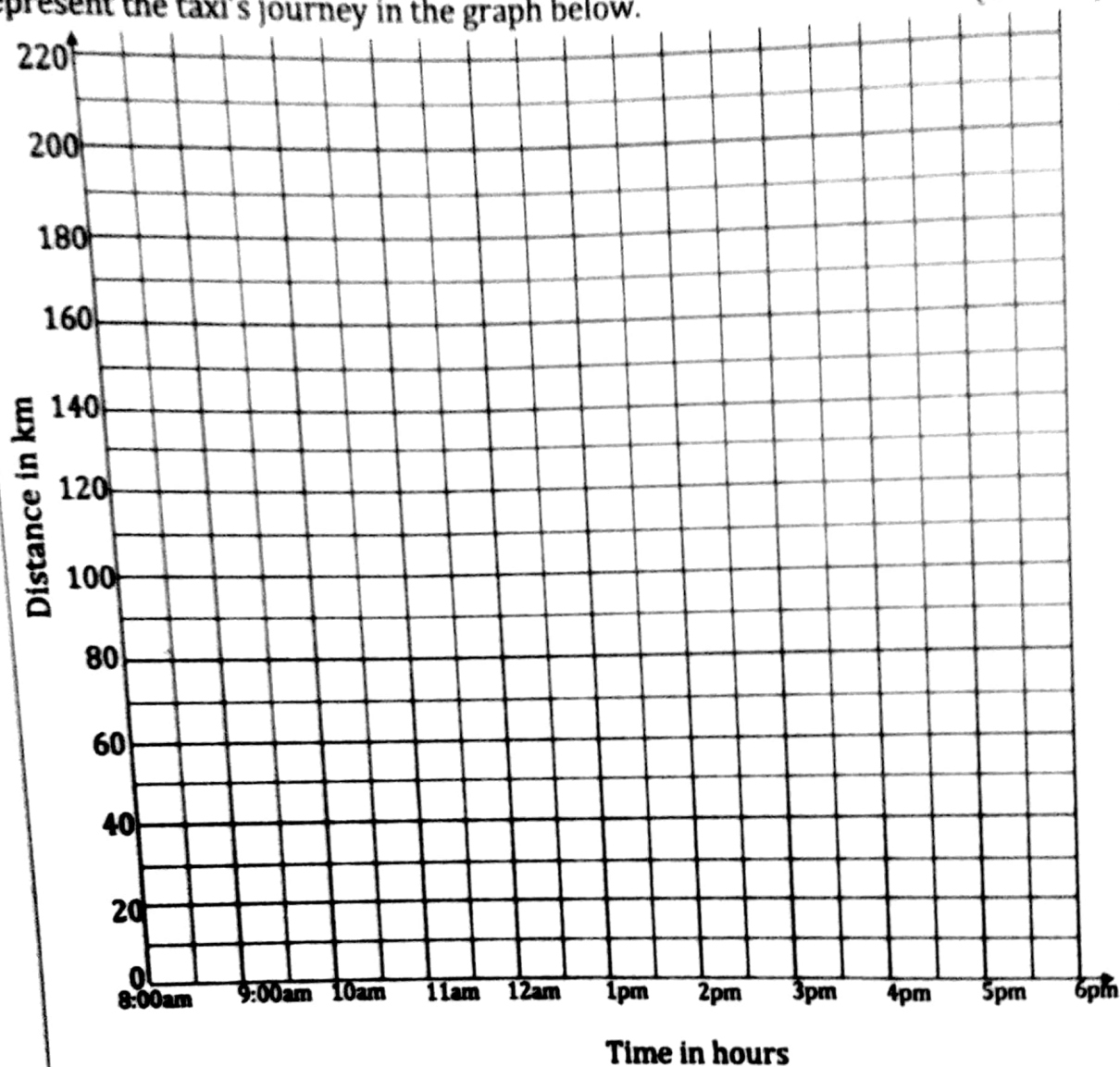**Find** the diameter of tank B.

A 100cm

B 100cm

24. The middle number of three consecutive odd numbers is K+1.
Find the numbers if their sum is 39. (5marks)

25. Complete the shopping bill below. (1mark each)

ITEM	QUANTITY	UNIT COST	AMOUNT
Meat	$1\frac{1}{2}$kg	Shs.12,000 per kg	_____
Cooking oil	500ml	Shs_____per litre	Shs. 5,000
Sugar	_____kg		Shs. 13,500
Salt	2kg	Shs.4500	Shs_____
Total Expenditure		Shs_____	Shs. 38.500

26. A taxi left Lira at 8:30am and moved at 60km/hr for 2hrs to Soroti. It made a stopover of 30 minutes and continued to Mbale which is 80km away in $1\frac{1}{2}$hrs. After resting for 1hour, it returned to Lira at a steady speed of 100km/hr. (4marks)

a) Represent the taxi's journey in the graph below.

b) Workout the average speed of the taxi while travelling. (2marks)

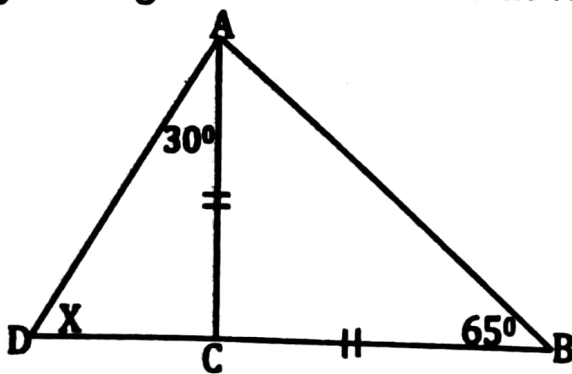| 27.	a) Lira is 60km away from Kwania and on a direction of S30°E. Omoro is 80km from Lira on a bearing of 080°. Using a scale of 1cm to represent 10km, make an accurate drawing showing the three towns. **(4marks)**
b)	Find the shortest distance between Kwania and Omoro. **(1mark)**
28.	A wire of length 176m is wound round a circular tank 200times. Find the radius of the circular tank. **(4marks)**

29. A man spent $\frac{1}{4}$ of his salary on fees. a quarter of the remainder on food. $\frac{1}{3}$ of what is spent on food is used to pay medical bill and saved the rest. If shs. 450,000 is saved. How much is his salary? **(5marks)**

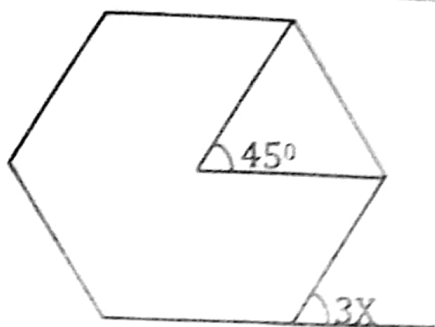**30.** Study the diagrams below and find the values of X.

a) **(3marks)**

b)   (2marks)

45^0

$3X$

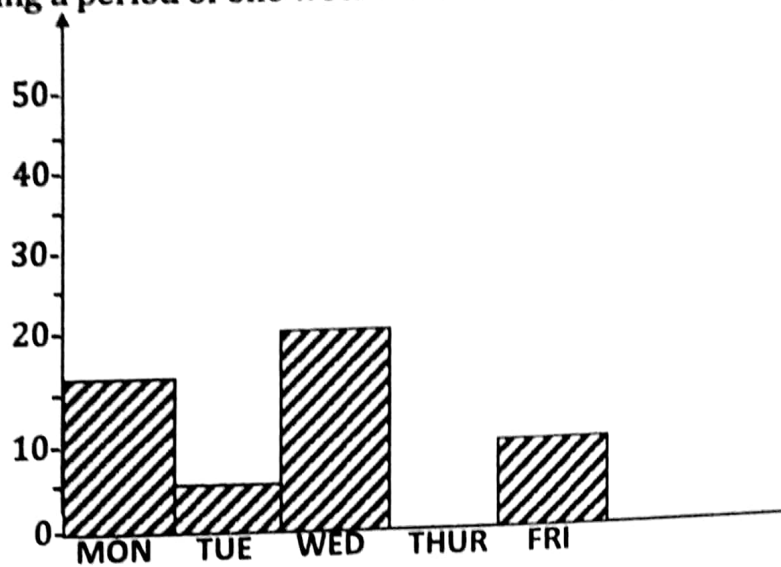| 31. | A retailer was given a discount of 20% on an item whose marked price is shs 250,000. He added 5% VAT and 10% for transportation. |
| a) | Calculate the marked price in the retailers' shop.   (3marks) |
| b) | How much was the profit made by the retailer?   (2marks) |

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32.	The graph below show the number of pupils who were absent in a class of 50 pupils during a period of one week in Adia Primary School.	

		(1mark)
a)	When was attendance highest?	
b)	How many pupils were present on Monday?	(1mark)
c)	Workout the average attendance for the week.	(3marks)

GOOD LUCK