

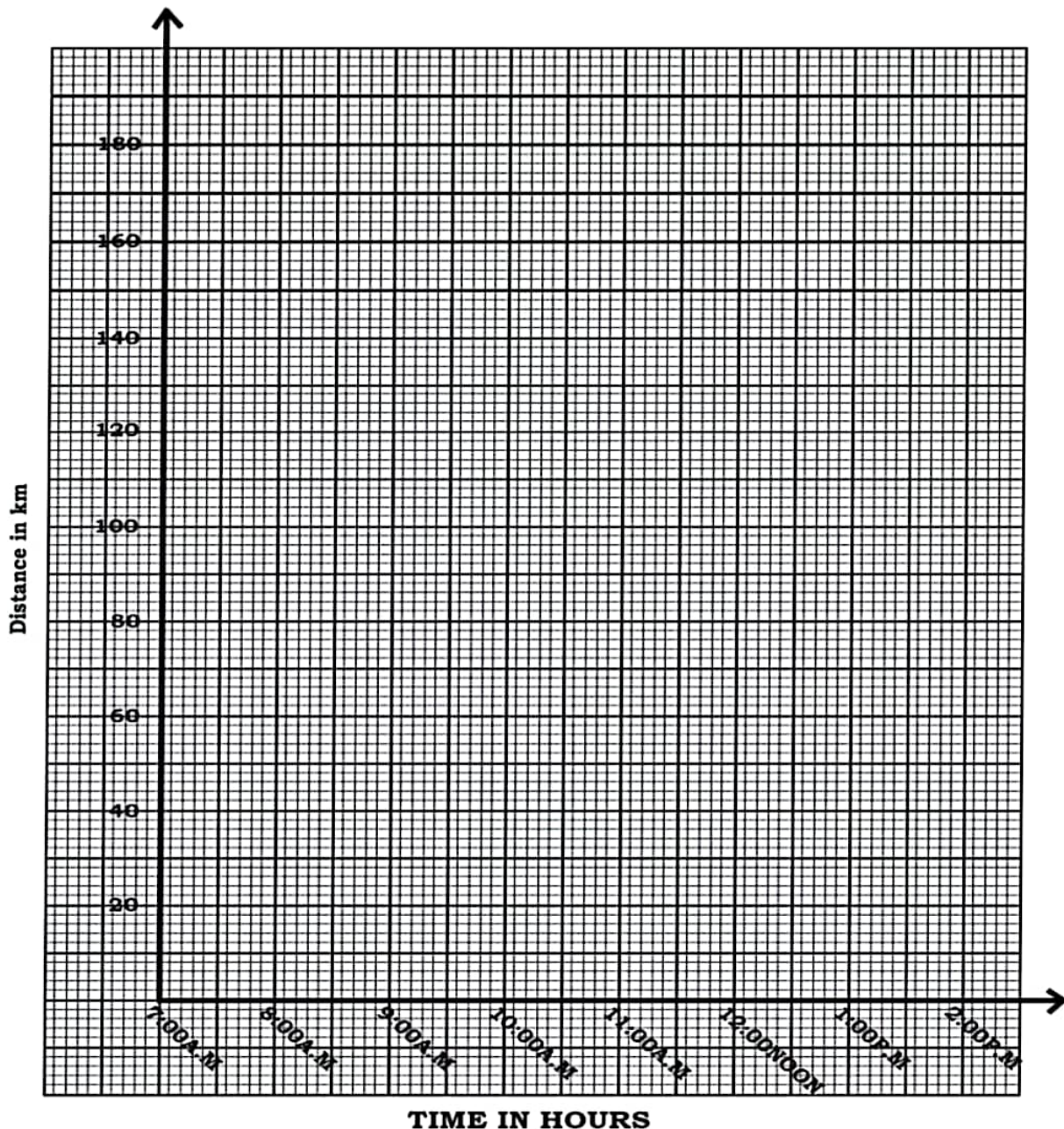
31. Using a pair of compasses and a ruler,  
a) construct a rhombus PQRS where diagonal  $PR=16\text{cm}$  and  
diagonal  $SQ=12\text{cm}$ . **(4marks)**

- b) Find the total distance round the rhombus you have constructed in  
question 31 a above. **(2marks)**

32. A cyclist left Mukono for Iganga at 7:00a.m. After cycling for  $1\frac{1}{2}$  hours at a speed of 60km/hr, the bicycle got a mechanical problem at Jinja. The mechanic took 90 minutes to repair the bicycle. The cyclist then continued with his journey of 180km from Mukono to Iganga where he reached at 1:00p.m.
- (a) Use the given information to show the cyclist's journey on the graph on page 12 **(4marks)**

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Turn Over



- (b) Calculate the speed the cyclist used to reach Iganga after repairing his bicycle. **(2marks)**

END

(a) The cost of a new pair of shoes is Ksh.18,000.

Find the equivalent cost of the same pair of shoes in United States dollars.

**(3marks)**

(b) Convert Ugsh.1,104,000 to British Pound Sterling. **(2marks)**

30. (a) Work out:  $\frac{0.56 - 0.2}{0.6 \times 0.3}$  **(3marks)**

(b) Write 0.66... as a common fraction in its lowest term. **(2marks)**



23. The total of three consecutive counting numbers is 24.  
If the largest number is  $k$ . Find the sum of the first two numbers.  
(4marks)

24. The table below shows the marks scored by a pupil in different Mathematics tests. Use it to answer the questions that follow.

<b>Marks (%)</b>	50	80	60	45
<b>Number of tests</b>	2	4	P	3

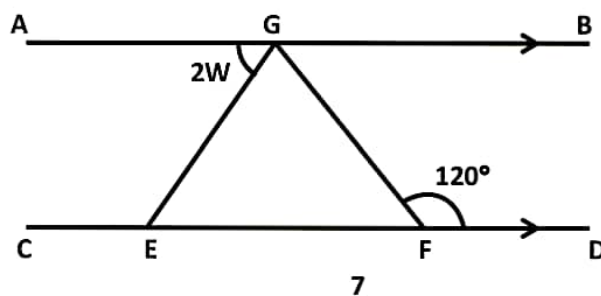
(a) Find the value of  $p$  if his average mark was 61.

(3marks)

(b) How many tests did he do altogether?

(1mark)

25. In the figure below, line  $AB$  is parallel to line  $CD$ .  
Angle  $GFD$  is  $120^\circ$  and angle  $EGF$  is  $70^\circ$  less than angle  $GFD$ .  
Study it carefully and use it to answer the questions that follow.



Turn Over

(a) Find the value of  $w$  in degrees.

(2marks)

(b) Calculate the size of angle  $GEC$ .

(2marks)

(b) If the tank had a cover of the same diameter.  
Calculate the area of the cover.

**(2marks)**

28. In a class,  $\frac{1}{6}$  of the pupils passed in Division **I**,  $\frac{2}{3}$  of the remainder passed in Division **II** while the rest passed in Division **III**.

(a) Calculate the fraction for the pupils who passed in Division **III**.

**(3marks)**

(b) How many pupils were in the class if 30 pupils passed in Division **III**?

**(2marks)**



29. The information below shows the cost of foreign currencies at a certain forex bureau. Use it to answer the questions that follow.

1 US dollar (\$)	= Ugsh.3600
1 British Pound Sterling (£)	= Ugsh.4600
1 Kenya shilling (Ksh)	= Ugsh.36

(a) The cost of a new pair of shoes is Ksh.18,000.

Find the equivalent cost of the same pair of shoes in United States dollars.

**(3marks)**

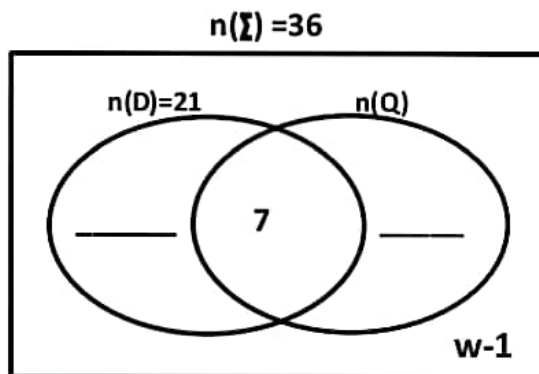


## SECTION B: 60 MARKS

Answer **all** the questions in this section

Marks for each question are indicated in the brackets

21. During a National competition of 36 participants, 21 participated in debating (D),  $(w+6)$  participated in quiz only, 7 participated in both activities while  $(w-1)$  did not participate in any of the two activities.  
(a) Use the above information to complete the venn diagram below.



- (b) How many pupils participated in debating complement?

**(3marks)**

22. (a) Work out:  $423_{\text{five}} - 234_{\text{five}}$

**(2marks)**

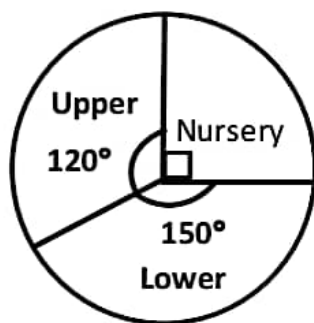
- (b) Given that  $43_y = 23_{\text{ten}}$ . Find the unknown base.

**(3marks)**



18. The number of pupils in a certain School decreased by 20%.  
If the new number of pupils now is 280.  
Calculate the number of pupils in the school before.
19. A motorist covered 90km in  $2\frac{1}{2}$  hours. How long will he take to cover  
24km while using the same speed?

20. The pie chart below shows the number of pupils in Nursery, Lower and Upper primary section in a certain school of 1800 pupils.



How many pupils are in the Nursery section?



12. Mr. Ssendawula woke up at five in the morning after sleeping for  $6\frac{1}{3}$  hours. At what time did he start sleeping?

13. Given that  $a = -2$  and  $b = 3$ . Evaluate  $2b - a^2$

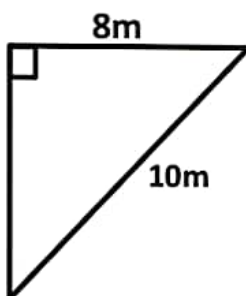
14. Round off 68.96 to one place of decimal.

15. A trader sold a dress at sh.37,000 making a loss of sh.13,000. How much did the trader buy the dress?



16. Find the smallest number of books when divided among 12 or 18 pupils equally, leaves no remainder.

17. Below is a triangular mat. Find the total distance round it.





**SECTION A: 40 MARKS**

Answer **all** questions in this section

Questions **1** to **20** carry two marks each

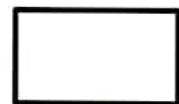
1. Work out:  $2 \overline{) 24}$

2. Write 94 in Roman numerals.

3. Given that  $\mathbf{K} = \{b, c, e, f, h\}$  and  $\mathbf{L} = \{a, b, d, f, h\}$ . Find  $n(\mathbf{K} \cap \mathbf{L})^c$

4. Express 2570 grammes as kilogrammes.

5. Subtract  $p-5$  from  $3p$



6. Work out:  $2\frac{1}{3} + \frac{3}{4}$

7. Double the next number in the sequence;  
1, 3, 6, 11, 18, \_\_\_\_

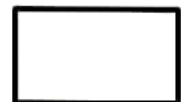
8. Using a pair of compasses and a ruler, construct an angle of  $75^\circ$  in the space provided below.

9. The table below shows the marks scored by different pupils in a test. Use it to answer the question that follows.

<b>Marks scored</b>	70	50	90	80
<b>Number of pupils</b>	2	3	4	1

How many pupils scored above the median mark?

10. A milkman sells milk in half litre cups.  
How many full cups of milk will he sell if he had a twenty litre jerrycan full of milk?



11. Find the value of  $P$  in the diagram below in degrees.

