NORTH ANKOLE DIOCESE
EDUCATION DEPARTMENT
PRE-PRIMARY LEAVING EXAMINATIONS 2023

MATHEMATICS

Time Allowed: 2 Hours 30 Minutes

Index No.:

Random No.						Personal No.		

Candidate's Name: .....

School Name: .....

Archdeaconry: .....

Read the following instructions carefully.

1. This paper has two sections: **A** and **B**. Section A has **20** questions and section **B** has **12** questions **(60 marks)**
2. All the working for both sections **A** and **B** must be shown in the spaces provided.
3. All working must be done using a blue or black ball point pen or ink. Any work done in pencil other than graphs and diagrams will not be marked
4. **No calculators** are allowed in the examination room
5. Unnecessary changes of work may lead to loss of marks.
6. Any handwriting that cannot be easily read may lead to **loss of marks.**
7. Do not fill anything in the boxes indicated:"**For Examiner's Use Only**" and those inside the question paper.

"FOR EXAMINER'S 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		

SECTION A. (20 Questions 40 Marks)

1. Work out:
$$\begin{array}{r} 6\ 7\ 4 \\ -\ 2\ 1\ 4 \\ \hline \\ \hline \end{array}$$

2. Write XCIV in words.

3. Given that set V= {All even numbers less 10}. Find n(V)

4. Simplify: +5 - +9

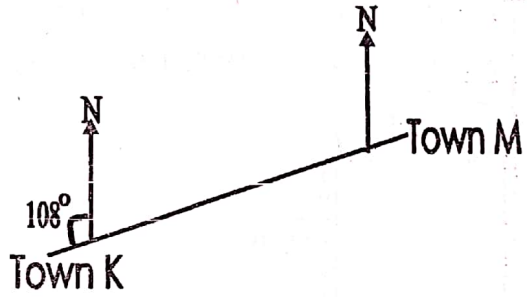
5. Workout: $\frac{1}{2} \div \frac{3}{4}$

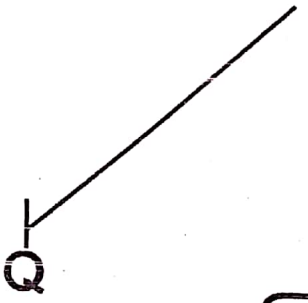
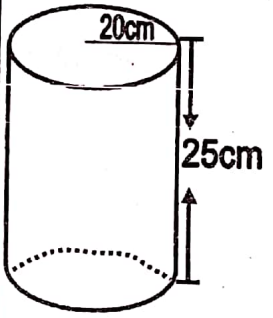
6. Find the distance around the shape below. (Use π as $\frac{22}{7}$)

7. Find the next number in the sequence.

1, 3, 6, 11, 18, _____

8. Convert 15m/s to km/h

9.	Given that $y = 5$ and $z = -3$, find the value of $y^2 - 5z$.	12	Round off the expanded number to the nearest tens. $4000 + 800 + 90 + 7$
10	In the diagram below, find the bearing of town K from town M.  	13	Solve: $7 - 2x \leq 19$
11	Jalia scored the following marks in her midterm exams. 98, 95, 92, 95 and 100. Workout Jalia's median mark.	14	Maria had a twenty thousand shilling note. She bought 2kg of rice at sh. 5,500 each. What was her change?

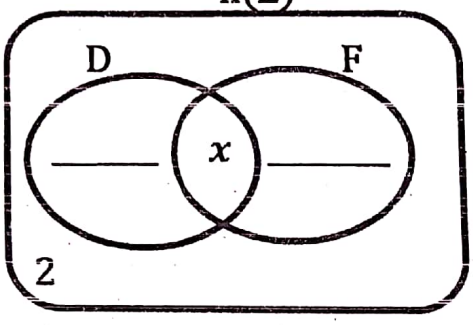
15	Using a ruler, a pencil and a pair of compasses only, construct an angle of 45^0 at point Q shown below.  	18	Find the Lowest Common Multiple (LCM) of 8 and 15.
16.	$\frac{3}{5}$ of the P.7 class are girls and the rest are boys. Find the ratio of boys to girls.	19	Find the volume of the container shown below. (Use π as 3.14) 
17	Workout: **(48 x 5) – (5 x 28) using distributive property.**	20	Today is **Monday**, what day of the week was it **67 days** ago?

SECTION B. (60 MARKS)

21 At a farewell party, 38 candidates took mountain dew (D) only, x took both mountain dew and Fanta (F), 20 candidates took Fanta while 2 candidates took neither of the two drinks.

a) Use the above information to complete the venn diagram below. (02marks)

$n(\Sigma) =$



b) Given that 50 candidates took one kind of drink only, find the value of x. (02mark

c) How many candidates attended the farewell? (01mark)

22 (a) Workout: $0.2 - 0.87 + 0.709$ (02mks)

(b) Simplify: $\frac{1.7 - 0.26}{0.48 \times 0.3}$ (03marks)

23 (a) Multiply: $11_{two} \times 11_{two}$ (02marks)

(b) Write 14_{five} in a binary system. (03marks)

24 Use the table below to answer the questions that follow.

Marks (%)	82	84	65	85
Number of pupils	2	4	3	1

(a) State the modal frequency. (01mark)

(b) Find the probability of picking a pupil who scored above the mean mark? (03marks)

25 A wheel of diameter **140cm** is to cover a distance of **19.8** kilometres.

(a) How many revolutions will it make? (03marks)

(Use π *as* $\frac{22}{7}$)

(b) If the wheel makes **5** revolutions per second, how many minutes will it take to cover that distance of **19.8km** (02marks)

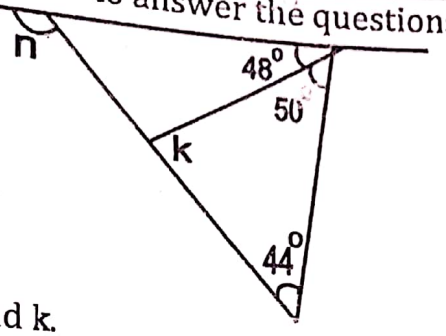
26 By selling a radio at **sh 60,000**, a dealer made a profit of **20%**.

(a) Calculate the dealers cost price for the radio. **(03marks)**

(b) Calculate the dealer's profit on the radio. **(02marks)**

27 (a) Name the polygon whose each interior angle measures 135^0. **(03marks)**

(b) Use the diagram below to answer the questions that follow.



Find the value of **n** and **k**.

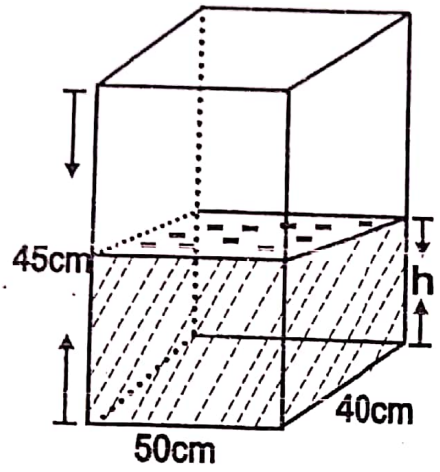
(03marks)

28 (a) Ampwera deposited **sh. 800,000** in a bank which offers a simple interest rate of 3% per annum for $2\frac{1}{2}$ **years.**

(a) Calculate Ampwera's simple interest after that period. **(02marks)**

(b) Calculate Ampwera's amount after the $2\frac{1}{2}$ years. **(02marks)**

29 After serving guests at a birthday party, 30 litres of juice remained in the container as shown below.



(a) Find the height (h) of the juice that remained in the container. (03marks)

(b) If each guest was served using a 500ml glass worth sh 2000, how much money was spent on the juice that was served. (03marks)

30 Baker is 32 years old and Adolf is 20years.

(a) How many years ago was Baker thrice as old as Adolf? (03marks)

(b) How old was Baker then? (01mark)

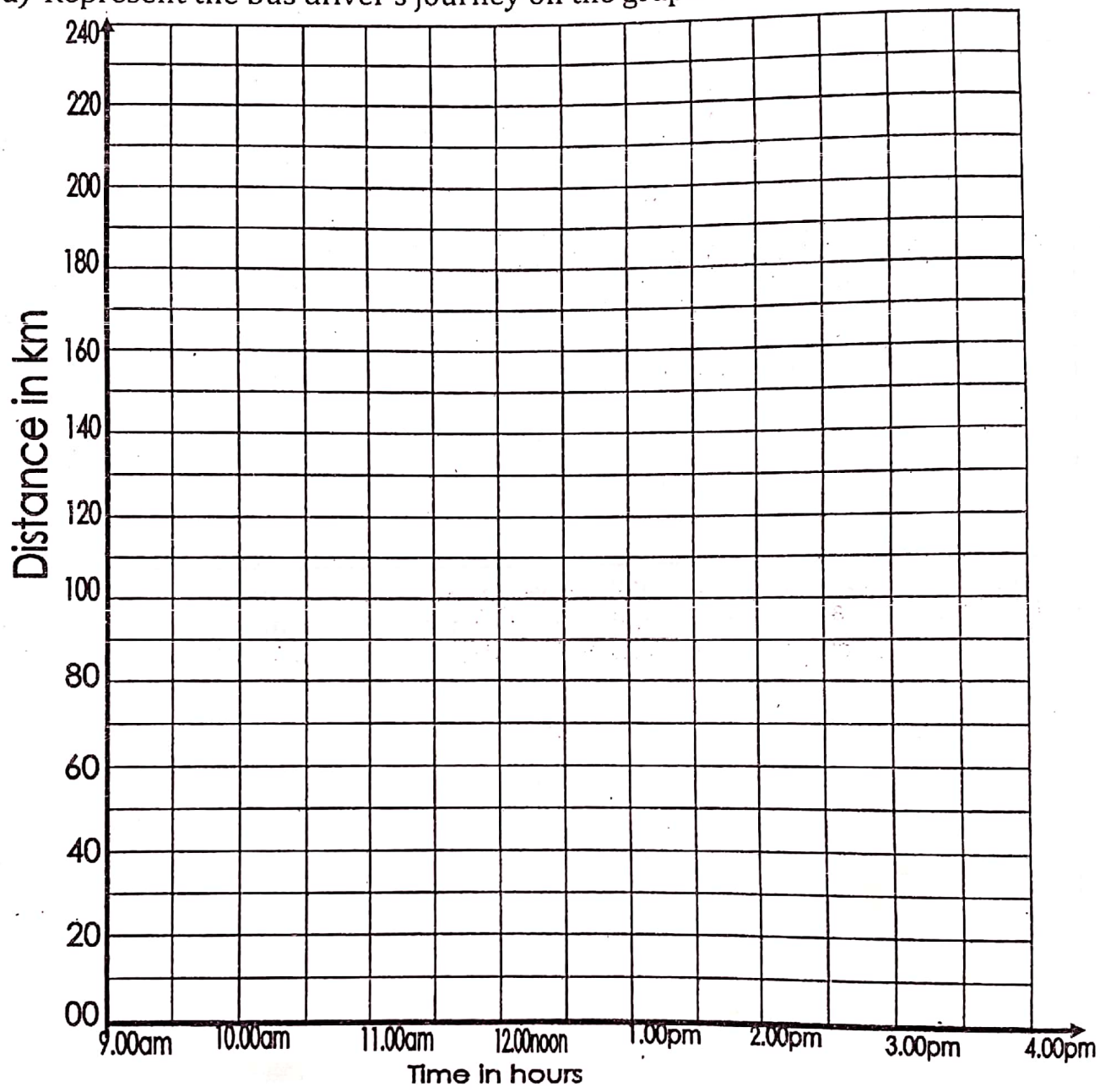
31 Using a ruler, a pencil and a pair compasses only,

(a) Construct a square **DUBE** whose diagonal $\overline{DB} = 8cm$. (04marks)

(b) Measure its width $\overline{DU}$. (01mk)

32 A bus driver left **town R** at **9.00am** while driving at **45km/h** for **2hours** and reached **town W**. He had an hour stopover at town W. He then left town W for town F at **50km/h** covering a distance of **150km**.

a) Represent the bus driver's journey on the graph below. **(03marks)**



b) At what time did the bus reach town F? **(01mark)**

c) Workout the bus driver's average speed for the whole journey while travelling. **(02marks)**