Name: _____ Date: _____

THIRD TERM E-LEARNING NOTE

SUBJECT: MATHEMATICS **CLASS: JSS 2**

SCHEME OF WORK

WEEK	**TOPIC**
1.	(a) Revision of Second term's examination (b) Re-presentation of real situation an graph and the reason(s).
2.	Angles and Polygon: (i) definition of angles (ii) Construction of move angles (iii) Definition of polygon with examples (iv) sum of interior angles of regular polygon: $(n - 2) \times 180^o$
3.	Angles of Elevation and Depression
4.	Bearing and Distances
5.	Statistics: Data Presentation
6.	Statistics (Continued)
7.	Review of first half term's work and periodic test
8.	Probability
9.	Pythagoras' Theorem
10.	Review of third term's work and periodic test.
11.	Revision and Examination
12.	Examination

REFERENCE

- WABP ESSENTIAL MATHEMATICS FOR JSS BK 2 BY A.J.S. OLUWASANMI
- NEW GENERAL MATHEMATICS BY J.B. CHANNON & ETAL

WEEK ONE

TOPIC: LINEAR GRAPH IN TWO VARIABLES, USING GRAPH TO SOLVE REAL LIFE SITUATION

CONTENT

Distance – Time graph
Velocity Time graph
Re-representation of real-life situation of graphs
Choosing scales.

Distance – Time Graph

Graphs are used to show the relationship between two quantities. A continuous graph is in the form of a continuous line and shows the relationship between the two quantities.
A distance-time graph shows the distance travelled against the time taken and is used to calculate speeds.
A distance-time graph is also called a
Travel graph. In travel graph, the time is usually plotted x – axis and the distance on y-axis.

Example

The graph below shows a man's journey from home to another town. Use the graph to find:
(a) The time taken to travel 75km
(b) The distance travelled in 3 hours
(c) The time taken to cover a distance of 175km
(d) The man's speed in km/h

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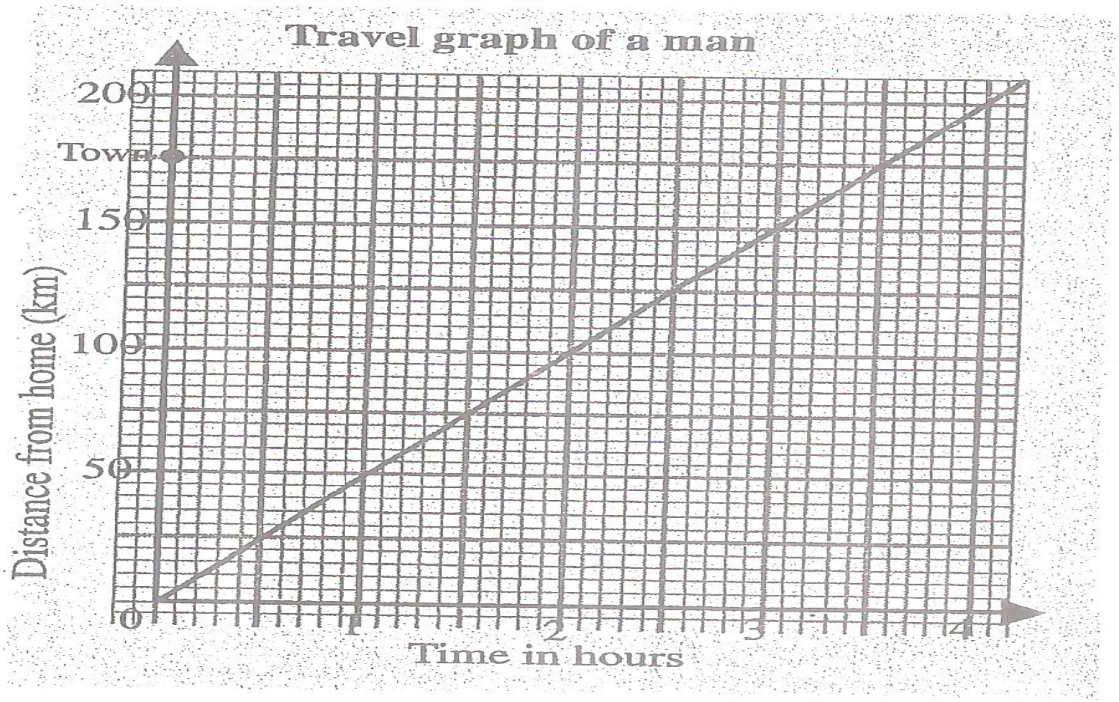
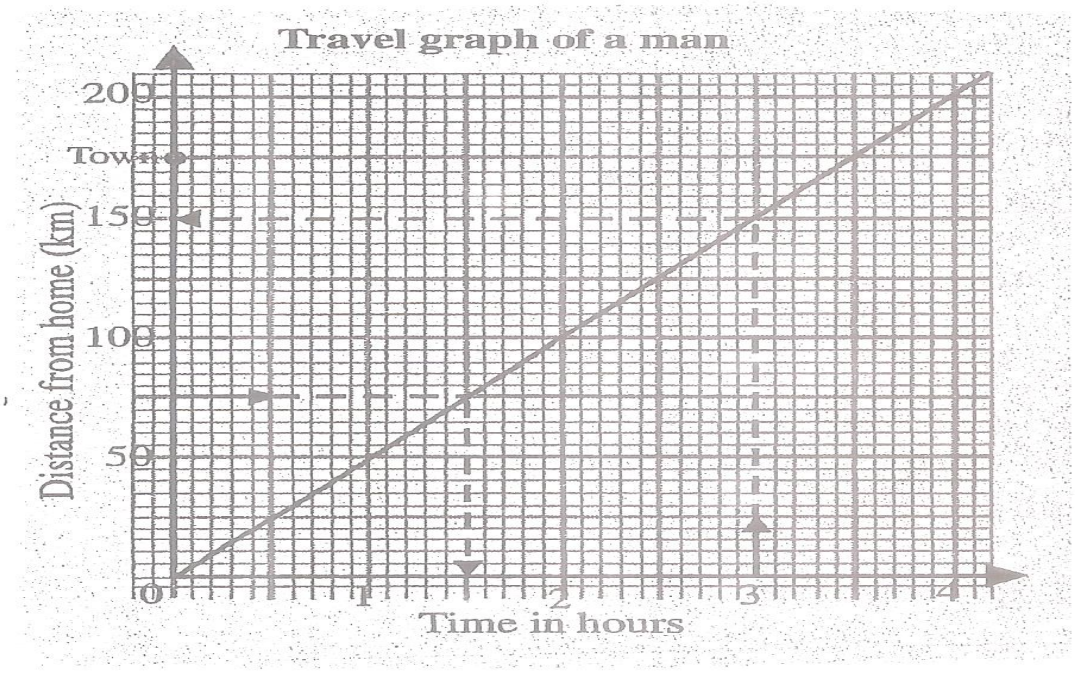


Solution with explanation
The horizontal (or x-axis) shows the time in hours.



2 units on the x-axis = 1 hour
So 1 unit = $\frac{1}{2}$ hr or 30 mins
The vertical axis (or y-axis) shows the distance in km.
2 units on the y-axis = 50km,
We can use a travel graph to find a distance and time at any point on the graph.
For example:
(a) The time taken to travel 75km is 1 h 30 mins (see the arrow)

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(b) The distance travelled in 3 hours is 150km (see the arrow)

(c) It took the man 3 hours 30 mins to cover a distance of 175 km.

(d) In $3\frac{1}{2}$ hrs the man travelled 175km

In 1 hr the man travelled $\frac{175km}{3\frac{1}{2}hr} = \frac{175\ km}{\frac{7}{2}\ h}$

$= \frac{175 \times 2}{\frac{7}{2} \times 2} = \frac{350}{7}$

= 50km/hr

EVALUATION

1. A girl walks along a road at a speed of 100m per minute
   A. Copy and complete the table

Time(s)	0	1	2	3	4	5	6
Distance(m)	0	100	200				

   B. Using a scale of 2cm to 1min on the horizontal axis and 2cm to 100m on the vertical axis draw the graph of the information
   C. Use the graph to find
      i. How far the girl has walked after 4.6mins
      ii. How long it takes her to walk 380m

READING ASSIGNMENT

Essential Mathematics Chapter 16, pgs 184-187 AJS Oluwasanmi
Exercise 16.6 Nos 1 & 3 page 201

GRAPH OF REAL LIFE SITUATION

Choosing Scale.

In choosing a scale, choose a big scale while…