**LESSON PLAN/NOTE FOR WEEK 1 ENDING 15/09/2023**

**Term**: First

**Week**: 1

**Date**: 11/09/2023.

**Class**: SS 2

**Subject**: Economics

**Topic**: Basic Tools of Economics Analysis.

**Sub-Topic:** Linear Equation and Measure of dispersion.

**Period**: Second

**Time**: 8:50-9:30.

**Duration**: 40 Minutes

**Number in class**: 8 students.

**Average Age:** 14 Years

**Sex**: Mixed

**Specific objectives:** By the end of the lesson, the students should be able to:

(1) Explain linear equations

(11) Solve problems on linear equation

(111) Describe measure of dispersion

(1v) Solve problems on mean deviation

**Rationale**: For the students to be able to calculate linear equation and mean deviation

**Previous knowledge:** The students have been solving problems.

**Instructional material:** A chart showing difference between highest and lowest numbers.

**Reference material**: Ande Cole Esan (2020) Essential Economics for senior secondary schools.

**LESSON DEVELOPMENT**

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| **Stages/Steps** | **Teacher's Activities** | **Students' Activities** | **Learning points** |
| **Introduction** | Reviews the previous lesson | Participate actively in the class discussion | To arouse the students interest to learn. |
| **Step 1** | Explains linear equation as: Linear Equation is an in which the argument appears only as first and not as any higher powers. | Listen carefully to the teacher. | For better understanding of the lesson. |
| **Step 11** | Guides the students to solve problems on linear equation. | Solve problems and pay attention. | To encourage critical thinking. |
| **Step 111** | Describes measure of dispersion as: Measure of dispersion also known as measure of variability, refers to the degree of spread of the numerical value in a distribution. | Respond to the class activity | To enable the students reason logically. |
| **Step 1v** | Leads the students to Solve problems on mean deviation | Solve problems on mean deviation | To encourage problem solving ability of the students. |
| **Board summary** | Summarizes the lesson as:  **Basics Tools of Economics analysis.**  **Linear Equation**  **Function:** This is a relation between two or more variables. If y is a function of x, it is written thus, Y=f(x) . When the value of x is known, the function tells us how to find the value of Y. Y=fx where  Y is a dependent variable  F means function  X is an independent variable.  **Linear Equation**  Linear Equation is an equation in which the argument appears only as first and not as any higher powers. The graph of a linear containing two variables is always a straight line. We are interested in understanding how two concepts or elements of the economy relates.Eg y= a+bx, a and b are constant, y depends on variable x.  (1) Given y= 5+2x. Determine the value of Y for the following:   |  |  | | --- | --- | | X | Y | | 5 |  | | 10 |  | | 15 |  |   (a) Y=5+2(x), Sub. 5 for x, Y=5+2(5) = 5+10=15  (b) Y=5+2(x), Y=5+2(10), 5+20=25  (c) Y=5+2(x), Y=5+2(15), 5+30= 35. And other examples.  **Measure of Dispersion**  Measure of dispersion, also known as measure of variability, refers to the degree of spread of the numerical value in a distribution. It measures the variation that occurs in a given set of data. Examples include range, Quartile, mean deviation, variance and standard deviation.  **Range**  Range is the difference between highest and lowest values in a set of data. Eg. (1) Find the range in the following data: 12, 6,19,8,24,16,36,9,40,6,50,48,12,10.  The maximum value=50, minimum value=6  The range=50-6=44.  **Quartile**  Quartile are the values which divide a given distribution into four equal parts. It is similar to the median except that the median divides a distribution into two equal parts.  1 first quartile Q1. 2 second quartile Q2. 3 Third Quartile Q3. 4 fourth Quartile Q4.  **Mean Deviation**  Mean Deviation is the arithmetic mean of all absolute deviation from the mean. It represents the differences of all the values from the arithmetic mean divided by the number in a given data. Formula for calculating mean deviation:  M.D £/x-x/  N  Example 1: Calculate the mean deviation of the following age of students in emerald Royal school: 4,5,6,8,10,3.  Solution  Find the arithmetic mean  X=4+5+6+8+10+3 =36/6= 6  6.  Calculate the mean deviation  /4-6/+/5-6/+/6-6/+/8-6/+/10-6/+3-6/  6  =12/6=2. | Copy and submit the note book for marking. | For better understanding. |
| **Evaluation** | Evaluates the lesson as:  (1) What is linear equation?  (2) Total cost is given below by the equation TC =400+20q. Calculate the total cost when quantity is (a) 6 (b) 5 (c) 7.  (3) what is Mean Deviation? | Respond to the questions. | Ascertaining the attainment of the stated objectives. |
| **Conclusion** | Rounds up the lesson by marking and correcting the students work. | Check and do their correction. | Consolidation of the lesson. |
| **Assignment** | Gives home work as:  (1) Calculate the mean deviation:  (a)5,6,7,7,9 (b) 2, 5,6,7,7,9. | Respond by doing the home work at home. | To ensure continuity of learning. |

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**15th September, 2023**

**DEPUTY HEAD INSTRUCTOR ADMIN**

**NB: Approved!**