# Detailed lesson plan in math essay sample 

## ASSIGN BUSTER

## I. Objectives

At the end of the lesson, the students should be able to:

1. Identify linear equation in two variables.
2. Solve and graph linear equation in two linear variables
3.. Present solutions with accuracy and precision in ones work. II. Subject matter

Topic: Linear equations in two variables and its graph
Reference: Elementary Algebra by Julieta G. Bernabe pages 147-149.
Intermediate Algebra II by Soledad Jose-Dila, Ed. D and Julieta G. Bernabe pages 5-6. Mathematics II (Concepts, Structures and Methods for High School) by Orlando A. Oronce, Gil Nonato Santos, Marie I. On Pages 167-174.

Materials: Illustrative visual Aids
III. Procedure
A. Preparation

Daily Routine
Prayer
Checking of Attendance
Checking of the Cleanliness of the Class Room

## B. Review

Before we proceed to our next topic let us first have a review about our previous lesson. So, what was our previous lesson all about? What can you say about plotting points?

How many quadrants are there in the Cartesian Coordinate Plane? Without plotting, state the quadrant on which each point lies? 1. $(3,5)$
2. $(-1,-2)$
3. $(-6,3)$
4. $(-4,-3)$
C. Motivation

I have two balls with me,. The red ball is for the girls and the white ball is for the boys. I will play a song entitled $\bullet$ Shembot $\downarrow$. While music is playing, you will pass the ball to one in your right side. When the music stops you stop passing the ball. The one who holds the ball will be the one to answer the question. Using the graph and the given ordered pairs decodes missing words.

1. $(-4,4)$
2. $(1,-8)$
3. $(2,-3)$
4. $(5,60$
5. $(-1,-1)$
6. $(2,2)$
7. $(-4,-5)$
8. (10,-1)

LINEAR EQUATION IN $\qquad$ VARIABLES AND ITS $\qquad$ .

Did you enjoy the game?
What was the statement formed?
Exactly! Linear Equation is our topic for the day.
D. Presentation

An equation may contain one or more variables. In our past lesson, we have studied linear equations in one variable. We learned to find the solutions to each equations. Let us now consider linear equations in two variables.

A linear equation in two variables ( $x \& y$ ) has the standard form $A x+B y=C$ where $A, B$, and $c$ are real numbers, and $A$ and $B$ are not both zero. Here are some examples of Linear equation in two variables.

1. $2 x+y=2$
2. $4 x+7 y=8$
3. $x=5-y$

Give another example of linear equations in two variables.
Very Good! Those are Examples of linear equations in two variables. How to solve and graph linear equation in two variables?

Example 1
$3 x-2 y=6$
Step 1: Find set of ordered pairs.

If $x=-2$, then
$3 x-2 y=6$
$3(-2)-2 y=6$
$-6-2 y=6$
$-2 y=12$
$Y=-6$
$(-2,-6)$
Can you follow?
Who can solve the ordered pair?
Excellent! And the last ordered pair?
Very Good!
Step 2: Plot the ordered pair in the Cartesian Plane
Step 3: Connect the points

## Example 2

$Y=2 x-3$
Find the ordered pairs that satisfy the equation.
Who can solve the first ordered pair of $x=0$ ?
Very Good! How about if $\mathrm{y}=0$ ?
Very good! If $x=2$ ?

Very Good! Who can graph the equation using the ordered pairs? Very good it shows that you understand the lesson.
E. Applications

Construct a table for $x$ and $y$ then graph

1. $2 x-y=4$

For group 1 use -1 for the value of $X$
For group $2 x=0$
For group $3 x=1$
F. Generalization

What is the standard form of Linear equation in two variables? Very good! What is the first step in graphing linear equation in two variables? Excellent how about the next step?

Very good! And the last step?
Very good!
IV. Evaluation
I. Identify which of the following are linear equations in two variables. 1. 3y$2 x-5$
2. $3 x-8=1$
3. $2 x+3 y=12$
4. $18 x+13 y=19$
5. $2 y+5=11$
II. Construct a table of values for $x$ and $y$ that satisfy the equation, and draw the graph of the equation.

1. $2 x-y=6$

For $x$, use the following values:
1.-1
2. 0
3. 1
V. Assignment

Graph each of the following equations. Use graphing paper.

1. $2 x-y=4$
2. $2 x+y=1 v$
3. $2 y-x=6$
4. $X-3 y=6$
5. $2 y-3 y=4$

Prepared by: Mrs. Norma T. Silvestre
Approved By: Mr. Mauro Tubig

