SUPPLEMENTAL LESSONS

Mathematics Grade 8
2nd Quarter

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2nd Quarter Grade 8
Supplemental Lesson Plan

Linear Inequalities in Two Variables

I.   Introduction

Elicit the students prior knowledge on linear inequalities in two variables by using YES/NO cards.

a.   Have the students write YES on one and NO on the other side of a note card or a piece of paper.

b.   Show to the class an example of inequality.

Example: $3x - y > -2$

- (0, 0)
- (1, 0)
- (-1, 1)
- (2, 0)
- (0, 2)

c.   The students will show a YES card if the given ordered pair is a solution, and NO if it is not a solution.

d.   Ask someone who is showing a YES card to justify his/her answer.

II.   Body

1.   Conduct a review of basic concepts on linear equation in two variables.

2.   Using Power of Two (Bellanca, 2009), let the students do the exploration activity on page 299 of the worktext.

a.   Ask the students to answer all exercises individually.

b.   When all students finish the task, ask them to form pairs.

c.   Instruct each pair to discuss their answers and if needed, come up with a new and better answer.

3.   Using the exploration as a spring board, conduct a whole-class discussion on linear inequality.

Processing Questions:

a.   What is a linear inequality in two variables?

Knowledge

Linear Inequalities in Two Variables

Learning Competencies

M8AL-IIa-1

- Illustrates linear inequalities in two variables

M8AL-IIa-2

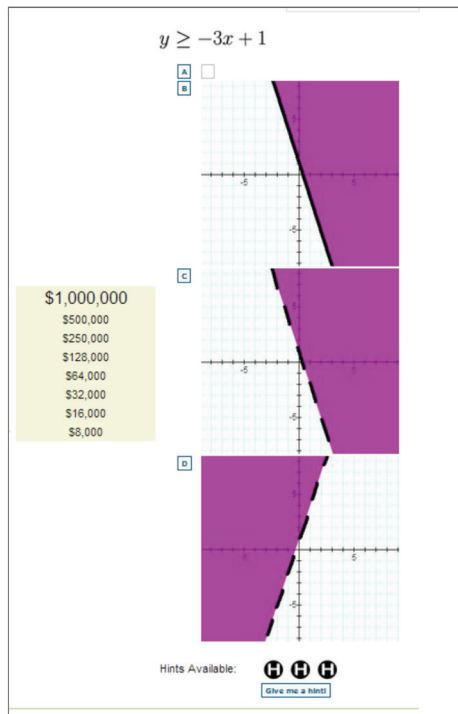- Differentiates linear inequalities in two variables from linear equations in two variables

KU

- The characteristics of linear inequalities and their representations are useful in solving real-world problems.

KQ

- How are linear inequalities useful?

b. What is the difference between linear equality and inequality in terms of:

- solutions
- graphs

c. How can we determine whether an ordered pair is a solution or not?

d. How can we describe the graph of solution set of linear inequality?

4. Discuss with the class the difference between linear equality and inequality.

5. Give the students practice exercises.

6. As additional exercises, show to the class graphs and let the students tell whether it is the graph of a linear equation or the graph of a linear inequality.

7. For enrichment, let the students answer an online interactive game.

(Sample site: http://www.quia.com/rr/79715.html?AP_rand=1972588)

$$y \geq -3x + 1$$

A ☐
B

C

$1,000,000
$500,000
$250,000
$128,000
$64,000
$32,000
$16,000
$8,000

D

Hints Available: Ⓗ Ⓗ Ⓗ
Give me a hint!

III. Conclusion

Conduct a spin off 3-2-1 activity (Rutherford, 2008) in facilitating the summary of the day's lesson.

Ask the students to write on a piece of paper their thinking on the:

- 3 important facts they learned
- 2 questions about the lesson
- 1 realization about the lesson