LESSON SUBMITTED TO THE GOLD SEAL LESSON EDITING PROCESS

Quadrant D Gold Seal Lesson
Submission Template

School	**Date**
Submitted by	**E-mail**
DESCRIPTIVE TITLE	**Operations and Coordinates**
SUBJECT(S)	Math
GRADE LEVEL(S)	**7th**

FOCUS
Students plot points on a coordinate system. They predict what will happen to a figure when the coordinates are changes, and then verify the actual result by graphing each change.

STUDENT LEARNING — Students are able to plot and read points from a coordinate systems with four quadrants. They apply the operations with positive and negative numbers by investigating transformations of geometric shapes on the coordinate system.

PERFORMANCE TASK — what students will do and produce to support Student Learning

Overview

1.a. Plot the following points on your coordinate system. Remember that the first coordinate of the pair names a position going right or left in the horizontal direction, and the second coordinate names a position going up or down in the vertical direction.
(1,1), (5,1),(6,2),(7.2),(7,1)(8,1),(9,2)
(9,4),(7,4),(6,5),(5,5),(1,3),(0,3),(1,1)

b. Connect the points in the order they are shown in 1a. What is the result?

c. Add -10 to the first coordinate of each point. What happens?

d. Add 2 to the first coordinate and add -5 to the second coordinate of each point. What happens?

e. What should you do to the coordinates if you want to move the drawing up three units and to the right five units?

STANDARDS — NO.1.7.5, NO.2.7.4, NO.2.7.4, G.10.7.1, G.10.7.2, G.9.7.2
Source of Standards:

SCORING GUIDE —
a. Students have successfully plotted the points (3pts)
b. Students have successfully connected the points to form a shoe (1pt)
c. The wooden shoe moves 10 units to the left. (2pts)
d. The wooden shoe moves 2 units to the right and down five units. (3pts)
e. Add 5 to the first coordinate and add 3 to the second coordinate of each pair. (4pts)

Rubric: Advanced: 10-13pts Proficient: 7-9pts Basic: 3-6pts Below Basic: 1-2pts

EXEMPLARS (optional) —copies/descriptions of exemplary student work that helps explain the lesson