Marble Hill School for International Studies

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EVALUATOR Portfolio Presentation Guidelines

Grade/Class: 9-A/C Subject: Algebra I Teacher: [redacted]

Project Title: Algebra Book, Volume II Date: June 2014

Note to Evaluator: For each project please allow appropriate time, based on the number of projects being presented, approximately 10 minutes each. Score students for each section of the presentation using the Portfolio Evaluation Sheet. Instructions for each section are written in *italics*.

SPECIAL NOTE*: Please do ***NOT*** collect materials. Students should keep all materials to use in preparation for their Regents Exam.

I. (1 minute) Project Materials:

A. Required Materials – 10 points: *Review the completeness of the following materials according to their weight out of 10 points:*

Project Materials	Point Value
Cover Page	1
Units 5, 6, and 7	3
Flash Cards for ***all*** Units, 1 through 7	6
*** Please do NOT collect materials**	

Total = 10 pts.

B. Material Presentation – 10 points: Written materials are organized and neatly presented.

II. (3 minutes) Project Reflection Essay – 20 points: ***Ask students to address the following points orally.***

- Describe the project, its name, and the tasks you were required to complete.
- Discuss what you found to be most interesting in this project.
- Reflect on what you learned from the project; be sure to explain all mathematic/algebraic concepts that relevant to your discussion.
- Comment on the project's design, why you think it was designed this way, how it was it useful to you, and if you could change the project, what would you have done differently.

Use the following to evaluate students.
This project is designed to thoroughly review and study the topics of Algebra I, Common Core. They were required to review the course standards and unit plans and provide an "Algebra Book" of all topics required. This was to include Essential Questions, Knowledge, Understanding and Skills required to master the course. Students were then to put specific concepts onto flash cards, with examples for both Algebra Book Volumes I and II, encompassing all 7 units of the course.

III. (5 minutes) Portfolio Discussion Questions – 30 points:

A. Project Clarifying Questions: ***NOTE:*** *Please ask this question to* ***ALL*** *students*

Questions: ***Please allow students to read the below problem and take notes.***

The daily high temperatures for the month of February in New York City were:

34°, 37°, 31°, 36°, 30°, 32°, 32°, 34°, 30°, 37°, 31°, 30°, 30°, 31°,
36°, 34°, 36°, 32°, 32°, 30°, 37°, 31°, 36°, 32°, 31°, 36°, 31°, 35°

1. What is the Mode?
2. What is the Median?
3. What is Q1 and Q3 (Q stands for "quartile")
4. What is the Range?

Answers:

1. Mode is the data point with the greatest frequency of occurrence and is therefore **31** for this data
2. The median is the center data point (or average of the two center data points) of the ORDERED list and equals **32**
3. Quartiles are the medians of the lower half of data (Q1 = **31**) or the upper half of data (Q3 = **36**)
4. The range is the maximum value, minus the minimum value = 37 – 31 = **6**

B. Course Content Questions: *Students **must** answer this question.*

Question: ***Please allow students to read the below problem and take notes.***

A group of 148 people is spending five days at a summer camp. The cook ordered 12 pounds of food for each adult and 9 pounds of food for each child. A total of 1,410 pounds of food was ordered.

Write an equation or a system of equations that describes the above situation and define your variables.

Find the total number of adults in the group and the total number of children in the group.

Answers:

- Variables need to be defined: Such as, "Let a = the number of adults" & "Let c = the number of children". Any variable letter is acceptable, as long as they are defined correctly.
- Two equations need to be written:
  1. A number of people equations: $148 = a + c$
  2. An amount (pounds) of food equation: $1410 = 12a + 9c$
- The two equations (known as a system of equations) need to be solved simultaneously using either method:
  1. Elimination Method: one of the two variables must be "eliminated" by adding the equations together. HOWEVER, it is first necessary to have opposite coefficients (the number in front of the variable) so that they will equal zero and therefore eliminate
     - Multiplying by -9: $-9(148 = a + c)$ will give $-1332 = -9a - 9c$
       The equations are then added together, eliminating the "c" variable: $78 = 3a$
       Solving for $a = 26$
       Students must then substitute the value of a=26 into one of the original equations (usually the most simple equation), such as: $148 = 26 + c$, therefore $c = 122$
     - Multiplying by -12: $-12(148 = a + c)$ will give $-1776 = -12a - 12c$
       The equations are then added together, eliminating the "a" variable: $-366 = -3c$
       Solving for $c = 122$
       Students must then substitute the value of c=122 into one of the original equations (usually the most simple equation), such as: $148 = a + 122$, therefore $a = 26$
  2. Substitution Method: Students could solve for either one of the variables and then substitute the expression into the other equation.
     - Solve for a: $a = 148 - c$
       This new value of "a" is then substituted into the other equation: $1410 = 12(148 - c) + 9c$
       Distributing the 12: $1410 = 1776 - 12c + 9c$
       Combining like terms: $1410 = 1776 - 3c$
       Solving for c: $-366 = -3c$ which gives, $c = 122$
       Again, the "c-value" must be substituted back into an original equation to solve for "a".
     - Solving for c: $c = 148 - a$
       This new value of "c" is then substituted into the other equation: $1410 = 12a + 9(148 - a)$
       Distributing the 9: $1410 = 12a + 1332 - 9a$
       Combining like terms: $1410 = 3a + 1332$
       Solving for a: $78 = 3a$ which gives, $a = 26$
       Again, the "a-value" must be substituted back into an original equation to solve for "a".

- Final answers, independent of method:
  Number of Adults = 26 & Number of Children = 122
  BOTH answers must be given!

IV. (1 minute) Semester Review – 10 points: *Have students discuss the following questions.*

1. How have you grown as a student in this subject?
2. What is one goal that you have for yourself in this subject?
3. What are the steps you will take to reach your goal?

V. Professionalism – 15 points: Student uses appropriate language & demeanor in presentation. Punctuality. Unexcused rescheduling will receive zero points for punctuality.

VI. Fluency– 5 points: Ease and confidence in subject matter, proper use of notes and ease of presentation.