

Name: _____

Date: _____

Performance Task: Graphical Displays & Measures of Central Tendency

Answer the following problems on lined paper. Your solutions will be assessed according to the criteria in the rubric provided.

Your Tasks are to be completed for: _____

1. “If all the numbers in a data set are squared then the median will also be squared.”

Prove this statement or give a counterexample (an example that shows the statement is false in general).

2. A box contains 7 ping-pong balls each labelled with a different number from 1 to 7. Three different balls are selected at random and the largest of the 3 numbers is recorded. The balls are returned and the process is repeated a large number of times. A frequency histogram for the numbers recorded is constructed. What shape would you expect it to have? Explain.

3. The 12 students in Mr. Fouryu’s Period 4 class had a mean final mark of 78.0%. The students in his Period 3 class had a mean final mark of 80.0%. Find the combined mean final mark of the two classes.

Thinking, Inquiry and Problem Solving: Rubric

Criteria	Level 1	Level 2	Level 3	Level 4
	problem-solving process shows limited effectiveness due to	problem-solving process shows some effectiveness due to	problem-solving process shows considerable effectiveness due to	problem-solving process shows a high degree of effectiveness due to
<i>Solution Process</i>	-minimal evidence of a solution process	-an incomplete solution process	-a solution process that is nearly complete	-a complete solution process
<i>Identifying Elements of the Problem</i>	-limited identification of important elements of the problem	-identification of some of the important elements of the problem	-identification of most of the important elements of the problem	-identification of all important elements of the problem
<i>Understanding Between Elements of the Problem</i>	-too much emphasis on unimportant elements of the problem	-some understanding of the relationships between important elements of the problem	-a considerable understanding of the relationships between important elements of the problem	-a thorough understanding of the relationships between all of the important elements of the problem
<i>Conclusion(s)</i>	no conclusions presented OR conclusion presented without supporting evidence	-simple conclusions with little supporting evidence	-appropriate conclusions with supporting evidence	-appropriate conclusions with thorough and insightful supporting evidence