**Honors Precalculus Project: Functions and their graphs**

Poetry:

Choose a math word. Write the letters vertically. Each line of the poem must begin with the corresponding letter of the title. A word, phrase or sentence may be written on a line.

Example:

**D**o look at the x values

**O**mit any x values that result in a zero in the denominator

**M**ake sure you use interval notation

**A** bracket indicated inclusive values and parentheses means non-inclusive

**I**f you have a square root functions, remember no negatives under the radical

**N**o repeating x values means the relation is a function

Choose **five words from our chapter one study of functions**. For each word chosen, create a poem in vertical form {acrostic poem} and either draw an accompanying picture or attach a computerized image.

Rubric:

Completion of 5 acrostic poems using terminology from functions unit. {50 points}

Poems are neat, attractive, logical, and complete with a graphic. {50 points}

Possible words to use:

* **interval notation**
* **identifying functions**
* **finding function values**
* **evaluating piecewise functions**
* **finding the domain and range from a graph**
* **finding y intercepts and zeros**
* **symmetry of graphs**
* **even and odd functions**
* **continuity and discontinuity**
* **increasing, decreasing, and constant behavior**
* **average rate of change**
* **parent functions and transformations**
* **functions operations and composition of functions**
* **inverse functions**