Pre-Calculus
Complex Numbers Investigation

Objectives: Students will be able to:
1. Use the language of mathematics to communicate mathematical ideas, using symbols and notations correctly.
2. Apply set theory. (Union, Intersection, Subsets, and Complements).
3. Learn about Venn and Tree diagrams.
4. Differentiate between the different parts of the Complex Numbers System.

Directions:
You will turn in two (2) sheets of white (not ruled) paper: one for the written portion and one for the diagram.

Written Portion: **(Must be typed)**

Provide a **_definition_**, **_set description_** and an **_example_** for each of the following:
Complex, Real, Imaginary, Rational, Irrational, Integers, Whole, and Natural numbers.
For Example:

Natural Numbers: Natural numbers are the set of counting numbers.
Natural numbers are a subset of the whole numbers.
Ex: {1, 2, 3, 4, 5…}

Diagram Portion:

Provide a **Venn Diagram** of the Complex Number System. Include a Title, and A COMPUTER online diagram. OR it can be drawn BY COMPUTER.

H E A D E R ➜

Pre-Calculus   **Student Name**
                                                 Period
   COMPLEX NUMBERS Investigation

Grading Criteria:
You will receive a Quiz grade (1 gr) for this investigation. See Rubric below:
Each of the definitions [8 total] along with the description & examples are 10pts. ➜   80pts
The diagram will be worth   ➜   20pts

TOTAL Pts. ➜   **100 pts.**

GOOD LUCK ☺