**GEOMETRY WRITING ASSIGNMENT—AREA OF PLANE FIGURES**

**Due Date_____ Points Possible_____**
**(Points will be deducted for a late assignment, regardless of the reason it is turned in late.)**

**Task: Find the total area of a plane figure composed of at least two plane figures, and explain the solution with complete sentences and accurate calculations.**

**Directions: (see sample on back)**

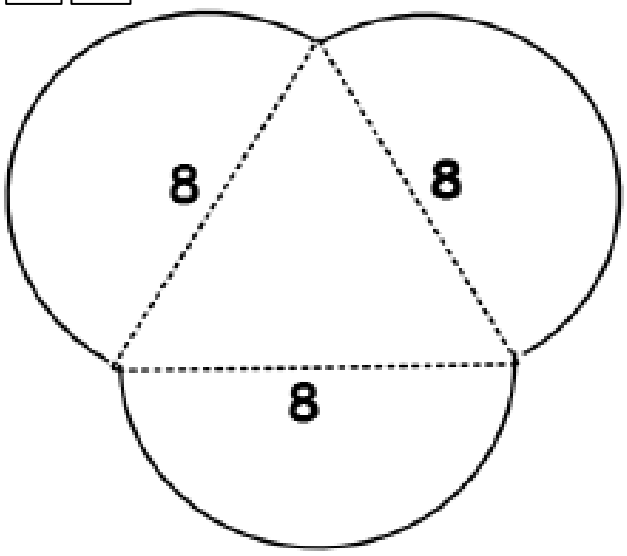
**1. Draw a plane figure composed of at least two different plane figures. Use a ruler and/or circle template or compass as needed. Label all measurements, and try to draw the figure to scale.**

**2. Give a step-by-step detailed written explanation along with accurate calculations, that show how to calculate the total area of the plane figure.**

**To get a perfect score, you must:**

- **Complete the task on time.**
- **Do all work NEATLY in ink or on a computer.**
- **Use complete sentences and show accurate work.**
- **Make up your own figure—you may not copy a figure from the textbook, class notes, homework, your friend, etc.**
- **Do this on your own. You may however, ask Mrs. Bryant whether or not you are doing the assignment correctly.**

SAMPLE




1. **I found the height of the equilateral triangle to be $4\sqrt{3}$ using a 30°-60°-90° triangle.**

2. **I calculated the area of the equilateral triangle.**

   **A=** $\frac{1}{2}(8)\left(4\sqrt{3}\right)=16\sqrt{3}$ **square units**

3. **I calculated the area of the 3 congruent semicircles with radius 4.**

   **A =** $3\left(\frac{1}{2}\pi\cdot 4^2\right)=3(8\pi)=24\pi$ **square units**

4. **I added the area of the equilateral triangle and the area of the 3 semicircles.**

   **Total Area =** $16\sqrt{3}+24\pi$ **square units**