CSCE 240 HOMEWORK 2 DUE: 22 MAY 2020

You shall submit a zipped, **and only zipped**, archive of your homework directory, `hw2.zip`. The directory shall contain, at a minimum, the files `comp_geo.h` and `comp_geo.cc` in a directory named `hw2`.
I will use my own makefile to make your `comp_geo.cc` file.

I found a really great computational geometry library that stores circles and rectangle in a very particular way–by keeping up with the points representing each object.

I require additional functionality for a project and am tasking you with the development of the library.

I have included a couple tests demonstrating the interfaces. You should definitely extend these tests. I will. You will also find a comp_geo header (.h) and source file (.cc). I provide those as an interface specification. **YOU** are responsible for files you edit.

The following functions should be implemented:

- `CalcCircumference` 1 point
- `CalcCircleArea` 1 point
- `CalcPerimeter` 1 point
- `CalcRectangleArea` 1 point
- `CalcDistanceSquared` 1 point
- `CalcDistance` 1 point
- `PointsEqual` 1 point

The functions' descriptions can be found by reading the header.

Late assignments will lose 25% per day late, with no assignment begin accepted after 4 days (100% reduction in points).

You will receive points for each test passed and one point for successful compilation against the `test_comp_geo.cc` file for a total of eight (8) points. Check your syllabus for further breakdown of grading.