

Homework 8 - CSE 283

Due: 11:59pm, April. 22 (Friday)

Design three classes:

1. Define a point class. It must be a “well-designed, reusable” class, that contains at least:
 1. Two floating point values X, and Y.
 2. A member function to display a point.
 3. Any member functions you believe to be important.
 4. Any operators that may be important.
2. Define a Shape class. It must be an abstract class, that contains at least:
 1. A linear ordering container of points
 2. A member functions to display shape data.
 3. Two pure virtual member functions for area and perimeter.
 4. Any member functions you believe to be important.
 5. Any operators that may be important.
3. Define a triangle class which inherits shape, that contains at least:
 1. Three points.
 2. A method to display shape data.
 3. Two member functions for area and perimeter.
 4. Any member functions you believe to be important.
 5. Any operators that may be important.
4. Similar to 3, define a rectangle class which also inherits shape.

You need to provide proper test cases to demonstrate your program.