Computer Information Systems
Basic C++ Assignment

For this project you will create 6 C++ console applications. Do not forget to create design documents for each of the projects. The design documents should list the basic steps that will be used in the applications. Print out the source code and design documents for each application and staple them to this document and turn in.

Student Name: _____

Scoring Guide

Items	1	2	3	4	5
			Points		
Number of design documents	2	3	4	5	6
Number of applications created		1-2	3-4	5	6
Missing header comments	6-7	4-5	2-3	1	0
Number of syntax errors	4	3	2	1	0
Inappropriate application names	4	3	2	1	0
Inappropriate variable names	6-7	4-5	2-3	1	0

Total points: _____ /30

Application #1:
Create an application that will ask the user to enter a radius, and then calculate the area of a circle based on the radius entered by the user. The application should display the calculated area. The formula for the area of a circle is area = 3.1416 * radius * radius.

Application #2:
Create an application that will ask the user to enter a length and width of a rectangle and then calculate the area of the rectangle based on the length and width of the rectangle. The application should then display the calculated area. The formula for the area of a rectangle is area = length * width.

Application #3:
Create an application that will ask the user to enter a length and width of a rectangle and then calculate the perimeter of the rectangle based on the length and width of the rectangle. The application should then display the calculated perimeter. The formula for the perimeter of a rectangle is perimeter = 2* length + 2 * width.

Application #4:
Create an application that will ask the user to enter a radius, and then calculate the perimeter of a circle based on the radius entered by the user. The application should display the calculated perimeter. The formula for the perimeter of a circle is perimeter = 3.1416 * 2 * radius.

Application #5:
Create an application that will ask the user to enter a base and height and then calculate the area of a triangle based on the base and height entered by the user. The application should then display the area of the triangle. The formula for area of a triangle is area = (base * height) / 2.

Application #6:
The application should ask if the user wants to calculate area or perimeter. It should then ask if the user wants to calculate area/perimeter for a circle/rectangle/triangle. The program should then ask for the correct items needed to calculate the item that the user requested and calculate and display the appropriate item. If the user selects perimeter and triangle, it should display an error message.