## Programming I <br> Overview of C++ - Math Operations and Formatting <br> Program \#6 - Lawns

You want to pay someone to mow lawns. They can mow the lawn at a rate of 2.0 square meters per second. They charge you $\$ 15.75$ an hour to mow the lawn. Each lawn is a rectangular yard with a rectangular house in the yard. Write a program that will allow the user to enter the length and width of the yard and the length and width of the house (in meters). Your program should print out the number of hours needed and cost for mowing the lawn.

Time should be written accurate to one decimal place and cost should be written accurate to two decimal places. Make sure the output is easily readable and well labeled.

When you run your program for submission you should run it THREE TIMES using the following data:

|  | House Length | House Width | Lawn Length | Lawn Width |
| :---: | :---: | :---: | :---: | :---: |
| Run \#1 | 80 | 70 | 256 | 321 |
| Run \#2 | 45 | 35 | 180 | 180 |
| Run \#3 | 37 | 39 | 188 | 222 |

It may be a good idea when starting a larger program to use pseudo code to outline your ideas before you begin. The larger and more complex the program the more important this becomes.

For example you may just make your program requirements (int main, \#include, etc), declare variables/constants, and comment the different items you want your program to accomplish. (See the reverse of this paper for my pseudo code/outline for the coins.cpp program!)

Once you are sure you know the structure and the needs THEN start to fill in your code at each comment.

