

Electronics hobbyist often design a printed circuit board (PCB) and have it fabricated when building electronics projects. Create a C++ program to compute the cost of fabricating a quantity of PCBs.

The cost to fabricate a PCB is based on the size of the board as well as many other factors. Your program will only consider the size of the PCB. Your program will ask the user for the width and height of the PCB in inches and the number of boards to fabricate. Your program will display the area of the PCB in  $\text{cm}^2$ , cost of a single PCB, number of PCBs to make, and the total cost. Your program must use stream manipulators to format the output. The cost per  $\text{cm}^2$  is fixed and equals \$1.968.

An example of the program's output is shown below. The example is for five 3" X 1.25" PCBs.

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PCB area in cm2           9.52  
Cost per PCB              18.75  
Number of PCBs           5  
Total cost                93.73  
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```

★ Do NOT use “magic numbers” in your code, use constants.

**Due date:** Friday 13th before 11:59 p.m.

**How to submit:**

Submit your .cpp file and design document (DOCX or PDF) to Canvas. Do NOT ZIP the files together. Submit each file separately.