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CS176L

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House Painting Algorithm

Input

* costPerSQFT = Please enter the cost per square foot:
* lenHouse = Please enter the length of the house:
* widHouse = Please enter the width of the house:
  + Width will be height of the house not including the roof (or height of the walls).
* heightHouse = Please enter the height of the house:
  + Height will be the height of the ENTIRE house.
* numWindows = Please enter the # of windows:
* lenWindows = Please enter the length of the windows:
* widWindows = Please enter the width of the windows:
* numDoors = Please enter the # of doors:
* lenDoors = Please enter the length of the doors:
* widDoors = Please enter the width of the doors:

Calculations

* normalSQFT = lenHouse \* widHouse
* roof = 0.5 (lenHouse \* (heightHouse - widHouse))
* peakSQFT = NormalSQFT + roof
* windowSQFT = numWindows \* (lenWindows \* widWindows)
* doorSQFT = numDoors \* (lenDoors \* widDoors)
* paintSA = peakSQFT + normalSQFT – (windowSQFT + doorSQFT)
* totalCost = costPerSQFT \* paintSA

Output

* Your total paintable surface area is [paintSA] square feet.
* Your estimate is $ [totalCost].