HOMEWORK 2

First, work through the Worked Examples WE2.1 and WE2.2

Next, your task is to design a program that models inflating a spherical balloon. First the balloon is inflated to have a certain diameter (which is provided as an input). Then inflate the balloon so that the diameter grows by an inch, and display the amount the volume has grown. Repeat that step: grow the diameter by another inch and show the growth of the volume. *Hint:* The volume of a sphere is 43πr343πr3.
Assuming that the input is 10, the two outputs, when rounded to the nearest integer will be 173 and 208

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1. Rearrange the following lines of code to produce correct pseudocode for this task:

growth = volume2 - volume1
volume2 = π × diameter × diameter × diameter / 6
Print growth
volume3 = π × diameter × diameter × diameter / 6
volume1 = π × diameter × diameter × diameter / 6
growth = volume3 - volume2
Prompt for diameter and read user input
Print growth
diameter++
diameter++

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2. Follow instructions in the link below to complete this assignment, and once your code passes without error, save it as plain text file "Baloon.cpp", and submit it on Gradescope:

http://wiley.code-check.org/files?repo=wiley&problem=ebook-bc-3-ch02-sec04-cc-1