

Assignment 1 — due Friday September 18th [*Revision* : 1.1]

This assignment comprises questions **3.2**, **3.3**, **3.4**, **3.6**, **3.9**, **3.10**, **3.11**, **3.13**, **3.16**, and **3.19** from Chapter 3 of Ostlie & Carroll.

Bonus points can be obtained by answering the following question: Calculate the temperature T of the Earth, assuming that (i) the Earth is a blackbody, (ii) its temperature is uniform, and (iii) it is in thermal equilibrium (i.e., the amount of thermal energy absorbed from the Sun every second is equal to the amount reradiated via blackbody emission). How does your value compare to the typical surface temperatures of the Earth? What might explain the discrepancy?