Assignment #4
Due Tuesday, July 30

1. Exercises 10.2.2 and 10.2.3 of my notes.

2. All exercises in Section 11.3.2 of my notes.

3. All exercises in Section 11.4 of my notes except 11.4.2, 11.4.4, and 11.4.11.

4. Read sections 4.6 and 7.4 of Kay.

   (a) Find an argument analogous to that on page 292 of Kay to show that for a sphere of radius r, $V = \frac{1}{3}rS$, where V is the volume of the sphere and S is its surface area. Do not use the formulas for V and S, but you may use the formula for the volume of a pyramid.

   (b) Use this result and $V = \frac{4}{3}\pi r^3$ to conclude $S = 4\pi r^2$.