Homework 9

The following are due on Monday, March 19:

§5.5 # 1, 14, 17, 24.

Extra credit: 31; use the relevant results from section 5.4.

§6.1 # 4, 7, 11.

§6.2 # 10, 11, 25, 27.

Extra credit: define "ellipsoidal coordinates" in $\mathbb{R}^3$ (with respect to the ellipsoid below) and use them to find the volume of the ellipsoid

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} \leq 1.$$