Assignment

Read rest of 15.4.

- p. 905 41, 45, 47, 51, 53

Take-aways

After reading this section, attending this class and doing this homework you should

- see how to integrate over a 3-d region that is best described in terms of spherical coordinates
- understand why $dV = \rho^2 \sin\phi d\rho d\phi d\theta$ when your surface is described by spherical coordinates
- develop intuition about what kinds of 3-d regions are best described in terms of cylindrical coordinates
- realize that this is exactly the same as what we've been doing but the regions and surfaces happen to be more easily described using a different coordinate system