

PROBLEM SET #6
Physics 1BH
Winter 2016, Prof. Saltzberg

DUE: Friday, Feb. 16 in my office at 11:30am

READING: Remaining chapter 6

You are encouraged to work with others, but try as much as you can on your own. At a minimum, check your answers with someone else.

1. PM 6.39 [constant magnitude of \mathbf{B}]
2. PM 6.41 [Integral of \mathbf{A} , flux of \mathbf{B}]
3. PM 6.42 [finding Vector potential]
4. PM 6.61 [rectangular torus]. Show that in the limit that the curvature of the torus is negligible, $(b - a) \ll a$, that you get back the field from a long, straight solenoid.
5. PM 6.66 [fields in a new frame]