PHYS 401: Electricity & Magnetism I Due date: Wednesday, March 10, 2021

Problem set #5

1) Problem 2.52

Additional exercise: Make a contour plot of the potential $V(\vec{r})$ with at least 10 contours. You can set $\lambda/4\pi\varepsilon_0=1$ for convenient plotting. You can use Maple, Mathematica, MatLab, or any other computer plotting software. Making the plot before part (b) may be helpful.

- **2) Problem 3.7**
- **3) Problem 3.8**
- **4) Problem 3.9**
- **5) Problem 3.12**