Homework 9
EE 381 Electric & Magnetic Fields (Fall 2026)
Friday, October 23, 2026

1) PE4.13 modified so that the dipole is $-240\hat{a}_z$ pC · m.
2) PE4.14 modified to position charges at (0, 0, 0), (-0.5 m, 0, 0), (0, 0, -0.5 m), and (0, 0, 0.5 m) respectively.
3) 4.26
4) 4.34
5) 4.36
6) 4.39 First, find a general expression for the vector electric field.
7) 4.48 Also, find the potential between each pair of points.
8) 4.69 In addition- c) Determine the electrostatic energy density.

Due Wednesday, October 28, 2026.

Note: Unless otherwise specified assume units of meters for distances, lengths, and/or positions.