

Physics 110B, Problem Set 2

Due Wednesday, October 16, 11:59pm

Upload to Gradescope

To help out with grading, please circle your final answers.

- 1 **Griffiths Problem 7.13 5th edition, 7.12 4th edition**
- 2 **Griffiths Problem 7.16 5th edition, 7.15 4th edition**
- 3 **Griffiths Problem 7.25 5th edition, 7.24 4th edition**
- 4 **Griffiths Problem 7.28 5th edition, 7.27 4th edition**
- 5 **Griffiths Problem 7.47 5th edition, 7.44 4th edition**

Only parts (a) and (b).

- 6 **Griffiths Problem 7.54 5th edition, 7.51 4th edition**

Hint: You will be using the equation that connects the curl of the electric field to the time derivative of the magnetic field. To calculate the time derivative at a time t , I would recommend that you work in cartesian coordinates. Then, once you set $t = 0$ you should switch to cylindrical coordinates.