Physics 430: Problem Set #1

Due Monday 1/27/2014, 10:35 am (in class)

• All assigned problems are from the text: David Griffiths, Introduction to Electrodynamics, 3rd Edition;

• Please read Chapter 1, Sections 1.1.1-1.1.4, 1.2;

1. Page 7, Problem 1.3; Use dot product!

2. Page 7, Problem 1.4; Note: Such a unit vector is perpendicular to any vector in that plane.

3. Page 10, Problem 1.7;

4. Page 15, Problem 1.11;

5. Page 15, Problem 1.13; Note: The del operator $\nabla$ works on $x$, $y$, and $z$ ONLY.

6. Page 18, Problem 1.15;

7. Page 20, Problem 1.18;

8. Page 24, Problem 1.25;

9. Page 24, Problem 1.26;