

## Problem Set 2

**Due:** Thursday, September 20, at 5 pm.

1. Griffiths, 2.7. You can use Gauss's law to check your answer, but first do the calculations using Coulomb's law.
2. Griffiths, 2.10
3. Griffiths, 2.16
4. Griffiths, 2.18
5. Griffiths, 2.23
6. Griffiths, 2.26. Older printings of Griffiths do not specify that the height of the cone is equal to the radius of the base; this makes the problem one of messy algebra. Please assume  $R = h$ .
7. Griffiths, 2.42
8. Griffiths, 2.43