1. Griffiths Problem 9.18 (Page 286 of your text has a table of resistivity ($\rho = 1/\sigma$) for metals.)

2. Griffiths Problem 9.19

Part (c) is related to the fact that in a good conductor the magnetic field arises from the current itself, which is proportional to $E$, rather than the displacement current, which is proportional to $\partial E/\partial t$.

3. Griffiths Problem 9.21

4. Griffiths Problem 9.22

5. Griffiths Problem 9.37

I was happy to see this classic problem appear in the text – parts (a)-(c) are pretty much what we worked out in class on Friday. (Although I’m afraid that on the blackboard on Friday in my rush at the end of class, I might have omitted a factor of $k$ in my expression for $\kappa$.) In this problem, you’ll be able to complete the picture with parts (d)-(f).