

### Workshop 3

Physics 122 Electricity and Magnetism  
July 13, 2010

*Please work on the following problems in groups of 3-4:*

*Giancoli Chapter 24:*

1. When a battery is connected to a capacitor, why do the two plates acquire charges of the same magnitude? Will this be true if the two conductors are different sizes and shapes?
2. An isolated charged capacitor has horizontal plates. If a thin dielectric is inserted a short way between the plates on the right-hand side, will it move left or right when it is released?

Problems

24-8

24-37

24-45

24-60