EE 42 Homework and Reading No. 1

Homework assigned Thursday 20 Jan. 2005; due at 5:30 pm Thursday 27 Jan. 2005 in the box labeled EE 42 in Room 240 Cory Hall.

**Reading:** Preface (note learning aids available) and Ch. 1 – Introduction

**Problems** are all in Hambley, 3rd Ed. (10 points each):

1. P1.10 (find current given charge)
2. P1.15 (energy given or taken from device when charge moves)
3. P1.16 (charging a chemical battery)
4. P1.17 (current and voltage for an element – find energy transferred)
5. P1.20 (measurement with ammeter and voltmeter – useful for lab)
6. P1.23 (sailboat battery and life in ampere-hours)
7. P1.36 (reference directions for voltage and Kirchhoff’s Voltage Law)
8. P1.46 (how resistance of a wire depends on its dimensions)
9. P1.51 (using Kirchhoff’s Current Law to solve a circuit)