**Physics 116C**                    **Homework Set #2**                    **Fall 2012**

*DUE: TUESDAY October 16, 2012*

To receive full credit, you must exhibit the intermediate steps that lead you to your final results.

1. Boas, problem p. 578, 12.7–5

2. Boas, problem p. 580, 12.8–6

3. Boas, problem p. 581, 12.9–2

4. Boas, problem p. 582, 12.9–16

5. Boas, problem p. 584, 12.10–3

6. Boas, p. 584, problem 12.10–7

7. Boas, p. 590, problem 12.12–4

8. Boas, p. 590, problem 12.12-9

9. Boas, p. 591, problem 12.13–6

10. Boas, p. 593, problem 12.15–8

11. Boas, p. 606, problem 12.21–9. The second solution is $\ln x$ times the first solution obtained by the Frobenius method, plus *another* Frobenius series. Determine the general term of this latter series.

12. Boas, p. 615, problem 12.23–9