

*DUE: TUESDAY JANUARY 25, 2011*

*MIDTERM ALERT:* The first midterm exam will take place from 12 noon–1 pm on Thursday January 27, 2011 in the Physical Sciences Building, Room 110 (our usual classroom). The exam will cover material from homework sets #1, #2 and #3, and include material from Boas, Chapters 1 and 2 (all sections) and the handout on asymptotic expansions. During the exam, you may consult Boas, your class notes (and any other handwritten notes), and any of the homework solutions and class handouts that are posted on the course website.

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

1. Boas, p. 57, problem 2.6–11.
2. Boas, p. 59, problem 2.7–13.
3. Boas, p. 61, problem 2.8–3.
4. Boas, p. 63, problem 2.9–9.
5. Boas, p. 64, problem 2.9–23.
6. Boas, p. 64, problem 2.9–28.
7. Boas, p. 67, problem 2.10–20.
8. Boas, p. 67, problem 2.10–28.
9. Boas, p. 69, problem 2.11–18.
10. Boas, p. 74, problem 2.14–9.
11. Boas, p. 74, problem 2.14–24.
12. Boas, p. 76, problem 2.15–7.
13. Boas, p. 79, problem 2.16–11.