DUE: TUESDAY MARCH 8, 2011

To receive full credit for the following problems, you must exhibit the intermediate steps that lead you to your final results. Checking your results by computer is optional.

1. Boas, p. 159, problem 3.11–7. First prove the two dimensional result, and then generalize the proof to n dimensions.

2. Boas, p. 159, problem 3.11–9.

3. Boas, p. 159, problem 3.11–10.

4. Boas, p. 159, problem 3.11–19.

5. Boas, p. 159, problem 3.11–21.

6. Boas, p. 159, problem 3.11–32.

7. Boas, p. 160, problem 3.11–42.

8. Boas, p. 161, problem 3.11–55. First do this problem using the methods presented in examples 3 and 4 on p. 156 of Boas. Then check your results with the help of the techniques developed in the class handout on three-dimensional rotation and reflection matrices.

9. Boas, p. 161, problem 3.11–58.

10. Boas, p. 161, problem 3.11–60.

11. Boas, p. 171, problem 3.12–4.

12. Boas, p. 172, problem 3.12–16.