Physics 116C **Homework Set #3** **Fall 2012**

DUE: TUESDAY October 23, 2012

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

1. Boas, problem p. 594, 12.16–6
2. Boas, problem p. 597, 12.17–3
3. Boas, problem p. 597, 12.17–4
4. Boas, problem p. 598, 12.17–13
5. Boas, problem p. 599, 12.18–4
6. Boas, p. 600, problem 12.18–6
7. Boas, p. 603, problem 12.19–1
8. Boas, p. 604, problem 12.20–6
9. Boas, p. 615, problem 12.23–10
10. Boas, p. 616, problem 12.23–19
11. Boas, p. 616, problem 12.23–24
12. Boas, p. 618, problem 12.23–26

REMARK: Bauer's formula plays a key role in scattering theory in quantum mechanics.