

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Department of Physics

Physics 221A

Prof. Mark Srednicki

Fall 2008

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ASSIGNMENT #3

Due 5 PM, Monday, Oct 13

Problems 3.2, 3.4, 3.5, and 5.1 in the book.

- 5.2) Verify that $a_1(-\infty)$ annihilates the ground state in the sense that $\langle \psi | a_1(-\infty) | 0 \rangle = 0$ for any normalizable state $|\psi\rangle$.