

**Quantum Mechanics, Physics 531**  
**Homework Assignment 2, due February 16, 2009**

**Problem 1.** Problem 1.7.

**Problem 2.** Problem 1.14.

**Problem 3.** Problem 1.17, but consider the following wave function:

$$\Psi(x, 0) = \begin{cases} A \cos \frac{\pi x}{2a}, & |x| < a; \\ 0, & \text{otherwise.} \end{cases}$$

**Problem 4.** Problem 1.18.

**Problem 5.** Problem 2.22.