

CS 4390/5353
Quantum Computing
Home Assignments 4–6
Due September 8, 2009

4. Prove that copying is not possible in quantum computing.
5. Start with arbitrary two 1-qubit states s_1 and s_2 and find their tensor product $s_1 \otimes s_2$.
6. Start with an arbitrary 2-qubit state and show, in detail, how this state will change when we measure the first bit.