MAT 142
Quiz #7

March 17, 2005

Intructions: You have 15 minuntes for this quiz. You may not use any books, notes, or calculators. Justify every statement that you make. If you wish to use a theorem proved in class, state the theorem precisely. Good luck.

Let $\sum_{k=0}^{\infty} a_k$ and $\sum_{k=0}^{\infty} b_k$ be two convergent series of non-negative numbers. Prove that $\sum_{k=0}^{\infty} a_k b_k$ converges.