Homework 5, Sta 531 Fall 2008

Due 9/22

- 1. 2.7 (a)
- 2. 2.11 (b)
- $3.\ 2.14$
- $4. \ \, \text{Problem } 2.3$
- 5. Suppose A_i is a sequence of 'measurable' subsets of S. If $\sum_{i=1}^{\infty} P(A_i) < \infty$. Show that $P(\{A_i \ i.o.\}) = 0$.

Notice $\{A_i \ i.o.\}$ is defined as

$$\bigcap_{k=3}^{\infty} \bigcup_{i>k} A_i .$$