## Probability (MATH 4733 - 01) Fall 2011 Exam 1 - Practice Problems

Due: never, but think Mon., Sep 26.

## Out of my mind

Let A, B, C be subsets of a set S.

- 1. T F  $(A \cap B) \cup C = A \cap (B \cup C)$ .
- 2. T F If A and B are mutually exclusive, then they are independent.
- 3. T F If a fair coin is tossed twice, and at least one head appears, then the probability two heads appeared is 1/2.
- 4. T F If a fair coin is tossed twice, the probability of getting one head and one tail (in some order) is 1/2.
- 5. Let S be a finite set. State the 3 axioms required for P to be a probability function on S.
- 6. State what it means for A to be an event in S.

## From the book

Section 2.2: 25, 27

**Section 2.3:** 3

Section 2.4: 13, 14, 18, 41, 50

**Section 2.5:** 20

Section 2.6: 27, 29, 39, 49, 55

Section 2.7: 3, 9, 13, 15, 17, 18, 19

**Section 3.2:** 1, 3, 19, 23, 25