## COT 3100, HW 6 assignment, Fall 2013

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due Sep 30, 2013 at 3pm via eLearning

- Problems from section 2.1: 24, 36. CORRECTION: in my first posting of HW6, I had a comment about how to do problem 38. I had meant to assign 38, not 36, but I don't want to change this now. So ignore the comment about problem 38.
- Problems from section 2.2: 4, 12. For problem 12, the general technique for proving that two sets C and D are equal is by showing  $C \subseteq D$  and  $D \subseteq C$ . To prove  $C \subseteq D$ , you need to prove the implication  $\forall x (x \in C \to x \in D)$ . In this problem you use this technique for two sets: A and the set expression  $A \cup (A \cap B)$ .
- Problems from section 2.3: 2, 6, 14, 16, 22, 32. For problem 22, a bijection is the same thing as a 1-to-1 correspondence.

All homework submissions must be done online, via eLearning. Please use PDF files (print to a PDF file if you use MS Word, for example). Or, scan your handwritten homework as a single PDF file (not jpg).