## UH - Math 3330-Dr. Heier - Spring 2015 HW 1

Due 02/02, at the beginning of class.
Use regular sheets of paper, stapled together.
Don't forget to write your name on page 1.
When handing in your work in class, look for the stack corresponding to the first letter of your last name.

1. (1 point) Section 1.1, pages 9/10: True or False (No proofs necessary, just say true or false.)
2. (1 point) Section 1.1, Problem 21
3. (1 point) Section 1.1, Problem 29
4. (1 point) Let $A, B, C$ be sets with $B \subset A$ and $C \subset A$. Does $A \backslash B=A \backslash C$ imply $B=C$ ? Prove your answer.
5. (1 point) Section 1.1, Problem 35
6. (1 point) Section 1.2, Problem $4 \mathrm{a}, \mathrm{b}, \mathrm{f}, \mathrm{g}, \mathrm{i}$. In spite of what it says in the textbook, you must prove all your answers for this problem.
7. (1 point) Section 1.2, Problem 8
8. (1 point) Section 1.2, Problem 14
9. (1 point) Section 1.4, page 34: True or False (No proofs necessary, just say true or false.)
10. (1 point) Section 1.4, Problem 2 a, $\mathrm{c}, \mathrm{d}, \mathrm{e}$
