

Turn in starred problems (and only those) on Wednesday 09/24/2007.

**Multiple-page homework must be STAPLED when handed in.**

Section 7

- 5\*. *For this problem only*, turn in just your answers, without justification.
- 6\*, 7\*

Section 9

- 6. Russell's paradox is an important milestone in mathematics: read and think, but you don't have to write anything up.

Section 10

- 5. This direction is easy.
- 6\*
- 7. Transfinite induction is an important idea, good for proving things about well-ordered sets, but I don't think that we will need it later. It is quite parallel to ordinary induction.
- 8. A simple idea, related to the intuitive description of well-ordered sets that we discussed in class on 9/17.