## 351B, Spring, 2005-6

Homework 3, Due May 2

1. Exercise 2.11 of Hindley & Seldin's book.

2. Exercise 2.19 of Hindley & Seldin's book.

3. Prove Lemma 2.21 of Chapter 2 of Hindley & Seldin's book.

4. Exercise 2.26 of Hindley & Seldin's book.

**5.** In his original (1935) proof of confluence of Combinatory Logic, Rosser used the combinators I and J as basic combinators, rather than Curry's K and S:

$$\begin{aligned}
& Ix \equiv x \\
& Jxyzw \equiv (xy)((xw)z)
\end{aligned}$$

Define J in terms of K and S.