Homework 7 Math 336, Winter '00 Due Friday, March 3

From the textbook:

- Page 242: 8, 15
- Page 250: 1abce, 3 (Show that at any point x where the Taylor series for  $\ln x$  converges, it actually equals  $\ln x$ ), 8, 11, 12

## **Important Changes:**

In problem 3 on page 250, only do the parenthetical extra part when  $x_0 = 1$ , and only do it assuming that  $|x - x_0| < 1/2$ .

Also, in problem 1e on page 250, you can take for granted that  $\limsup_{j\to\infty}\sin j=1.$