$\begin{array}{c} {\bf MAT\ 142} \\ {\bf Problem\ Set\ \#11} \\ {\rm due\ in\ class\ on\ April\ 21,\ 2005} \end{array}$

- 1. A postol, section 11.13 # 1–4, 11, 13, 15
- 2. Find the power series expansion of $f(x) = \int_0^x \sin t^2 dt$ about x = 0. For what values of x does this series converge to f(x)?