MAT 142
Problem Set #11

due in class on April 21, 2005

1. Apostol, 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 $f(x)$?