MATH 3162 Homework Assignment 4

Instructions: Solve and turn in all of the assigned problems, showing ALL steps or reasoning used in your solutions.

Due on Monday, February 11th, at the BEGINNING of class.

Abbott: 6.2.3(a,b,c) ONLY for $g_n$ (For (b), you do not need to use the definition, you should have a simple reason why the convergence cannot be uniform. For (c), use $(2, \infty)$ as your set)

6.3.2(a,b), 6.4.5(a, b)

Extra problems for graduate students:

Abbott: 6.3.4 (hint for showing divergence of derivatives: prove that $\forall x, \cos(nx)$ does not converge to 0 as $n \to \infty$)

6.3.7, 6.4.1