MATH 373: CLASS 5

1. Exercise

1) Find a simple example of the function with the initial point such that the Newton's Method does not converge to the root of the given function.

2) Let $f(x) = x^2 - e^x$ and $p0 = 1$. Use Newton's method to find $p3$.

3) Let $f(x) = x^4 + x^2 - 1$, $p0 = 0$ and $p1 = 1$. Use Secant method to find $p3$.