

Math 371

Quiz 6, April 3, 2015

Name: _____

1. Compute the minimal degree Lagrange form interpolating polynomial $p(x)$ for $f(x) = \sqrt{x+1}$ through nodes $x = 0, 3, 8$.
2. Use the polynomial interpolation error formula to bound the error of p 's approximation of $f(1)$. Compute the exact error of p 's approximation of $f(1)$ by using your work from problem 1.