

1. (5 points)

Do P2.1.1 from Textbook.

2. (5 points)

Assume that L (scalar), R (scalar), and $c(1:4)$ are given. Assume that $L < R$. Write a MATLAB function that computes $a(1:4)$ so that if $p(x) = a_1 + a_2x + a_3x^2 + a_4x^3$, then $p(R) = c_1$, $p'(R) = c_2$, $p''(R) = c_3$, and $p(L) = c_4$. Use “\” (“mldivide”) to solve any linear system that arises in your method.