

Homework 9

April 4, 2009

1. Using equations (4.43) and (4.37) in the book, show that

$$q_3''(x_0) = h^{-2} [6(c_{-1} + c_1) - 12c_0], \quad q_3''(x_n) = h^{-2} [6(c_{n+1} + c_{n-1}) - 12c_n]. \quad (1)$$

Using this piece of information, derive equations (4.46) and (4.48).

2. Problems 4.8.6 and 4.8.10.