

CS 3513 - Numerical Analysis

Homework #6 - 2006.09.27

Due Date - 2006.10.06

Name: _____

This homework assignment will utilize the *splinecoeff.m* and *splineplot.m* Matlab programs.

First, using the natural spline conditions, and secondly the clamped spline conditions, compute (with the help of the *splinecoeff.m* program) the cubic splines coefficients for the given sets of points below. Plot the graphs of each spline using the *splineplot.m*.

set 1: $\{(1, 4), (2, 5), (3, 3), (4, 1), (5, -1), (6, 3), (7, 2)\}$

set 2: $\{(-2, 1), (0, 0), (2, 6), (3, 12), (4, -1), (8, 7), (10, 10), (12, 3), (15, 1), (16, -4)\}$