

MATH 321-01 (151)  
MATLAB # 2  
Due Oct. 15, 2015

Write a program to implement the modified Algorithm for Natural Cubic Spline. The program will use the MATLAB built in backslash operator to solve the system  $Ax = b$ . Another useful command is: `zeros(n)`.

Modify your code to find the Clamped Cubic Spline.

Use your programs to form both the natural and the clamped spline to approximate  $f(x) = \sin(x)$  on the interval  $[0, \pi]$  using the two interior points  $\frac{\pi}{3}$  and  $\frac{2\pi}{3}$ .