Ryan Brosnahan

Exam 2

1.



>> X = [2 7 12 16 19 43];

Y = [5 9 8.5 11 10 10.5];

% try y = a ln(x) + b

S = @(R) sum((( R(1) \* log(X) + R(2) )-Y).^2);

guess = [1 1];

U = fminsearch(S, guess);

A = U(1)

B = U(2)

x = 1:.05:45;

y = A \* log(x + eps) + B;

plot(X, Y, 'o', x, y)

A =

1.8706

B =

4.4475

2.

>> X = [2 7 12 16 19 43];

Y = [5 9 8.5 11 10 10.5];

x = 1:.05:45;

% not-a-knot spline function

y2 = spline(X, Y, x);

plot(X, Y, 'o', x, y2)





This spline is bad.