MATH 310: Numerical Analysis
Details for Homework #12
due Wednesday, December 9 at 5 pm

1. (3 pts.) Section 4.8 # 5, 6, 7

2. (12 pts.) Using your spline functions.

   On the class website, you can find a number of clip art silhouettes (cars, cat) and some graph paper.

   Your job is to use splines *of your own making* to create such a silhouette. (You are also free to choose an alternative silhouette.) This means you only need to make the silhouette; do not worry about any fancy stuff.

   To do this, you will need to use a grid, or more likely multiple grids of equally spaced nodes, find the corresponding y-values and use your spline functions to interpolate.

   There is a tremendous amount of freedom here, but your final project should include:

   (a) a text writeup (circa two pages?) explaining your method and how you approached this problem

   (b) a MATLAB file that does the interpolation and creates the silhouette

   You will be graded both on your writeup and your code, and how complicated/successful you are with this project. Enjoy.