

Statistics 745

Group Assignment 9

1. Using the attached **R** code, implement the following with a basis function,

$$\hat{f}(x) = \sum_{m=1}^M h_m(x).$$

Put the results in a power point presentation and copy/paste a plot of:

- (a) Fit piecewise regression of an intercept.
- (b) Fit piecewise linear (discontinuous).
- (c) Fit linear (continuous).
- (d) Fit quadratic (continuous).
- (e) Fit cubic (continuous).