Stat 8680: Applied Nonparametric Methods

Assignment 7

1. Problem 11.7. (page 344)

Applied Nonparametric Methods HW7

@Problem #1.7

13.7 Mattingley (1987) gives the following data based on the US census of agriculture which gives at approximately 10 year intervals from 1920 to 1980 the percentages of US farms with tractors and farms with horses. Explain why it would be pointless, or wrong, to fit a linear regression for tractor percentage on horse percentage to these data. Suggest what alternative type(s) of regression might be more appropriate.

Per cent tractors 9.2 30.9 51.8 72.7 89.9 88.7 90.2

Per cent horses 91.8 88.0 80.6 43.6 16.7 14.4 10.5

an ore day.