

Lecture 21

WEIGHTED REGRESSION

The following are some sketchy notes about weighted regression.

Weighted Regression

If you have heterogeneity of variance, you can sometimes deal with it by using weighted regression. The weights should be proportional to the reciprocal of the variances. A typical model is that the variance is a function of the predictor variable(s) which deals with typical increasing/decreasing heterogeneity of variances cases. We discussed the various common choices of weights in class $w_i \propto 1/x_i$, $w_i \propto 1/\sqrt{x_i}$, $w_i \propto 1/x_i^2$, $w_i \propto x_i$, etc... We also discussed that if you want accurate prediction intervals after a weighted regression analysis in Minitab, then there is a 10-step process to go through. These are given in Minitab's help menu and also at:
<http://mypage.iu.edu/~ehouswor/Fall2004/Math467/L20.html>

Exercises for Lecture 21

1. -

2. -