Replay the example in question 1 using the lm( )-function.

Do the p-values coincide? Why or why not?

Do the following diagnostic plots:

(a) x-values on the x-axis and residuals on the y-axis,

(b) predictions on the x axis and residuls on the y-axis,

plot(fitted(fm), resid(fm), main="Residuals vs Fitted",

xlab="Fitted values", ylab="Residuals")

(c) predictions on the x axis and observed values on the y-axis,

(d) histogram of the residuals,

(e) normal scores plot to check for skewness, kurtosis and outliers

qqnorm(resid(fm), main="Residuals Rankit Plot")