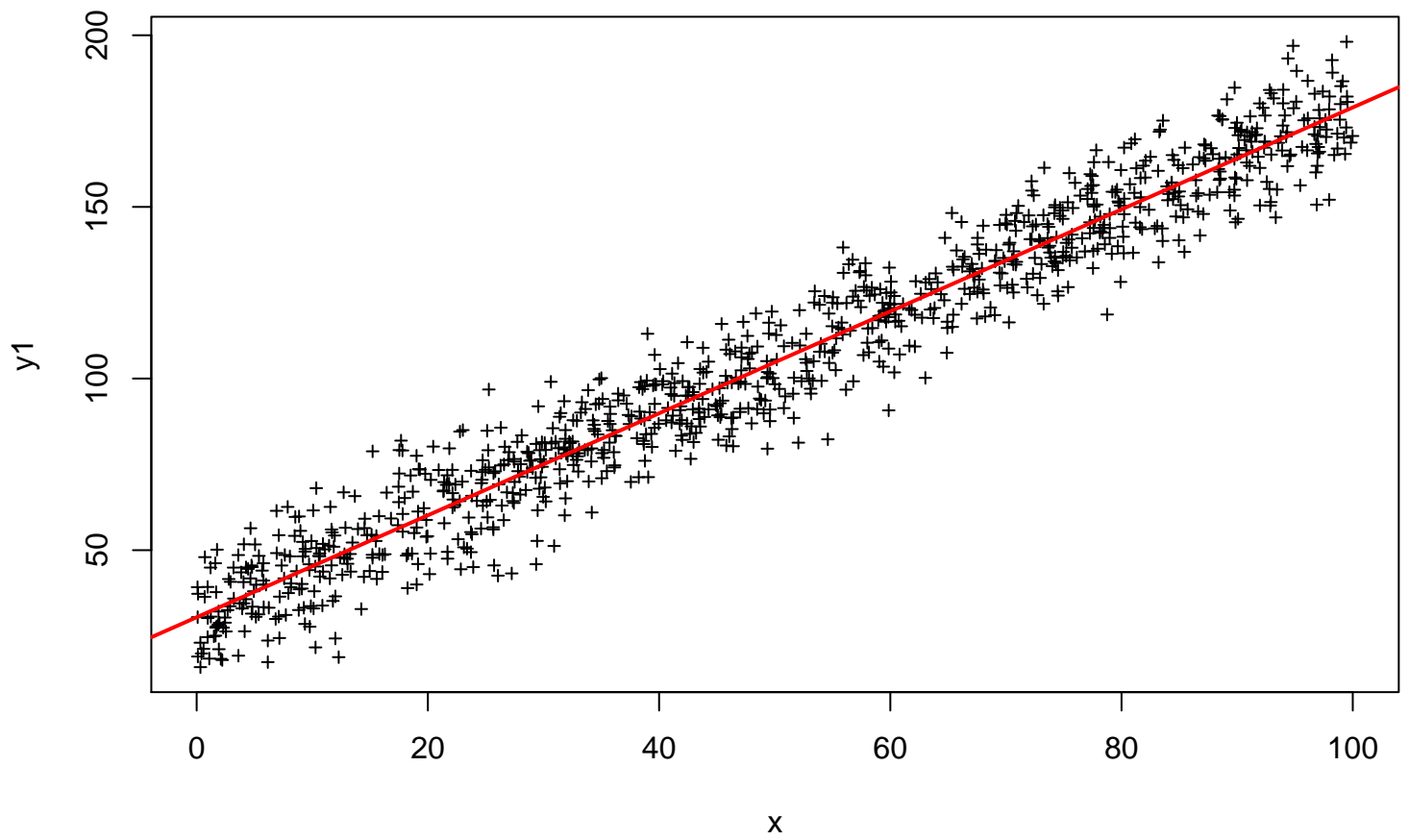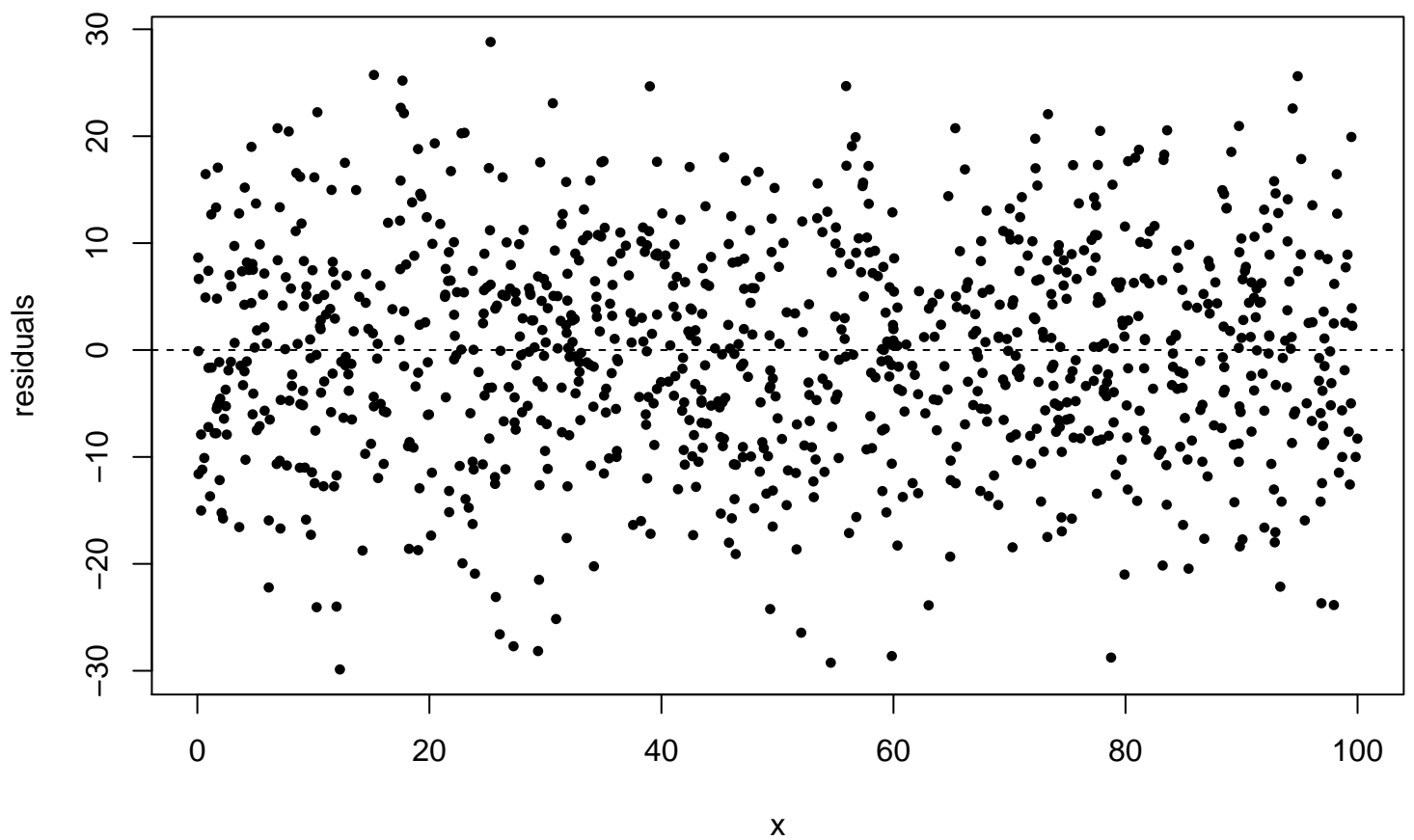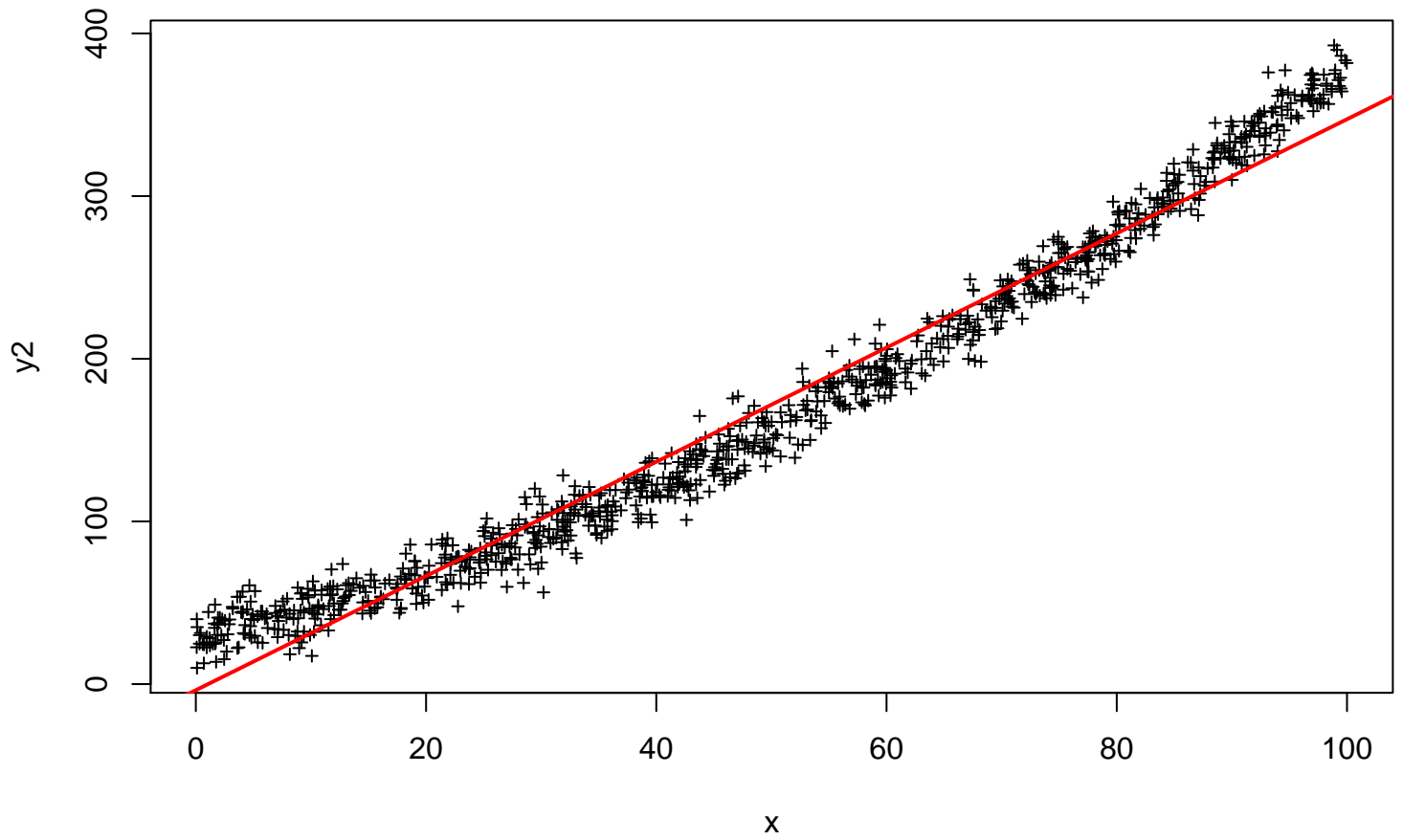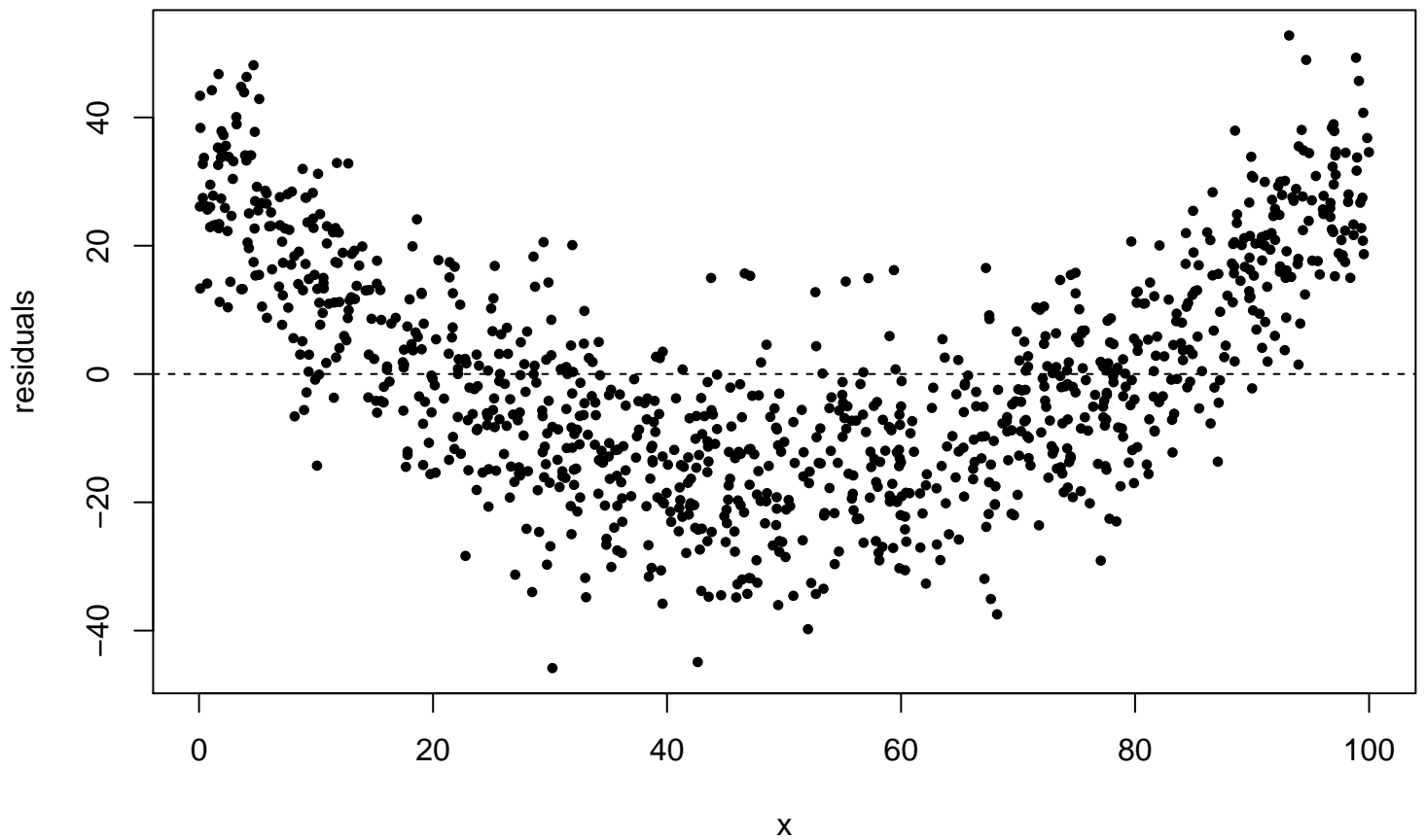# Original data

Residuals show no pattern vs x
Straight line assumption correct
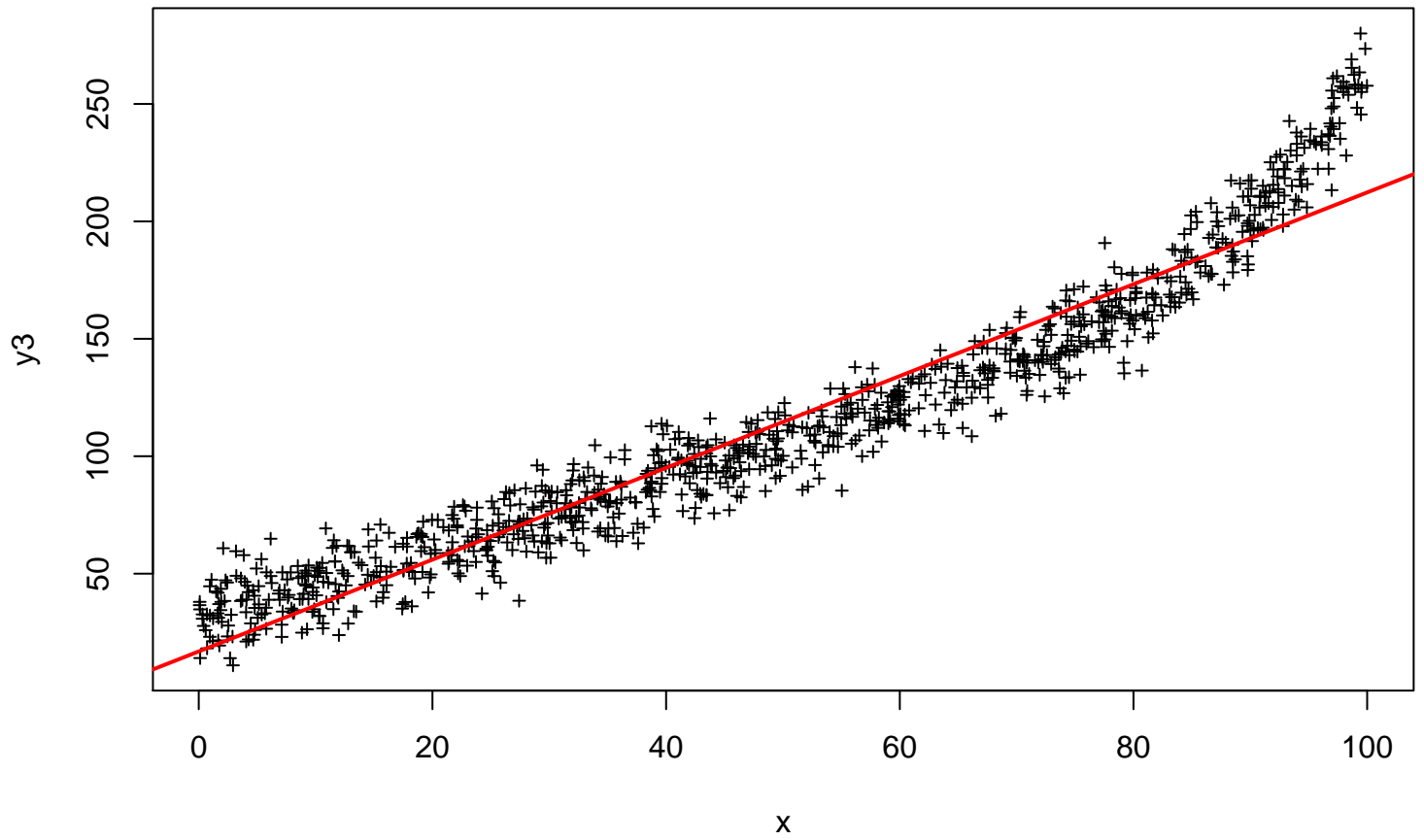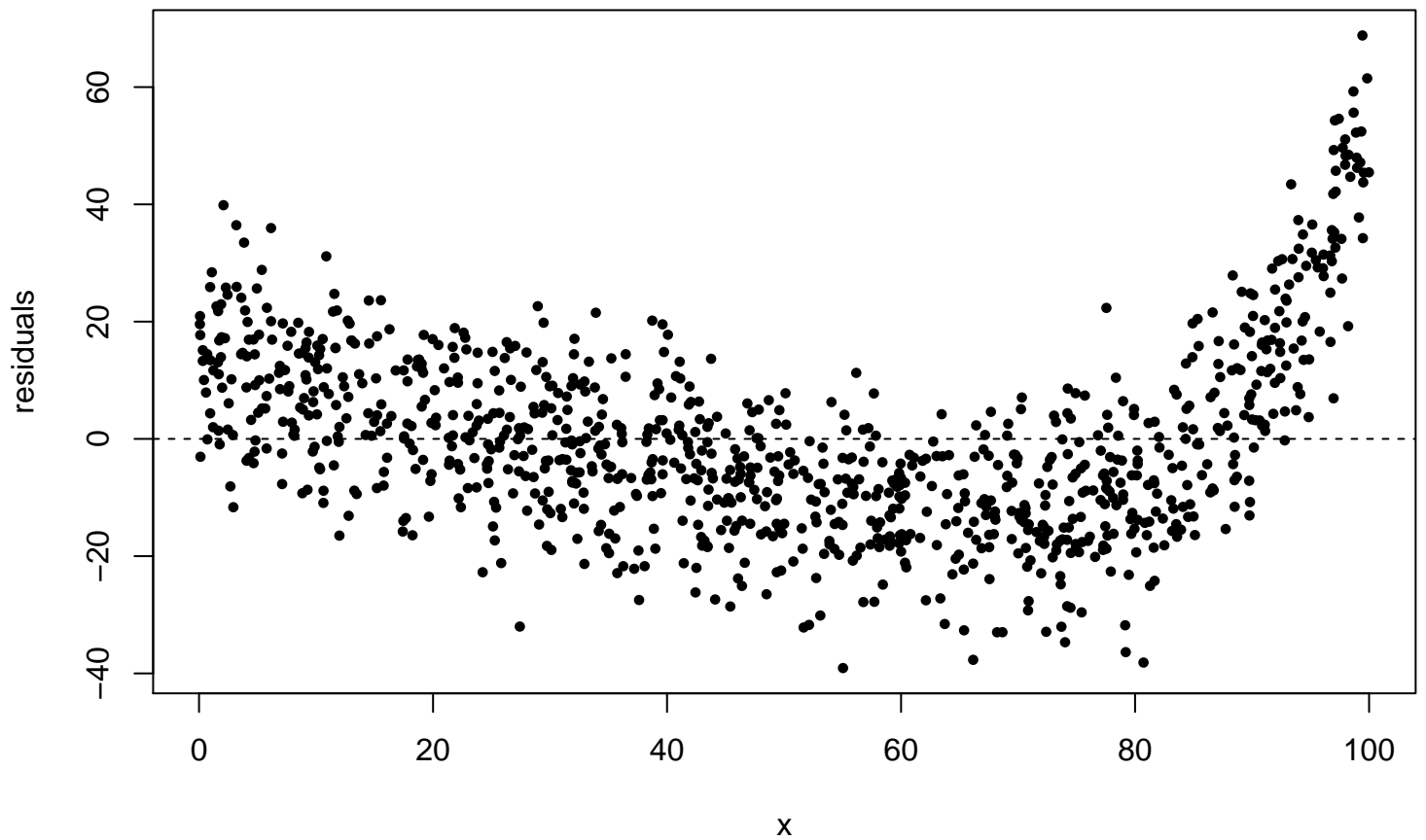
Original data

Residuals show parabolic pattern vs x
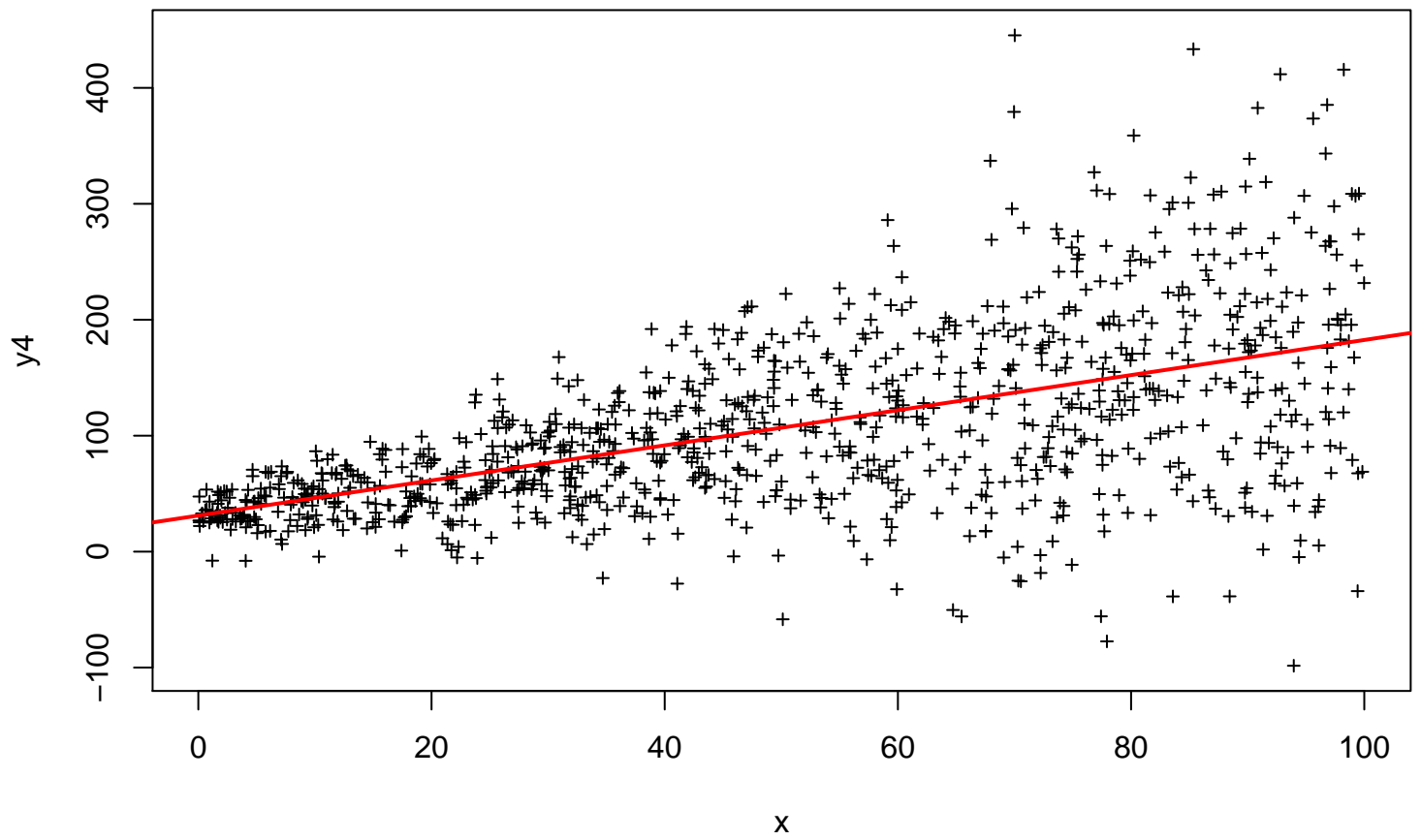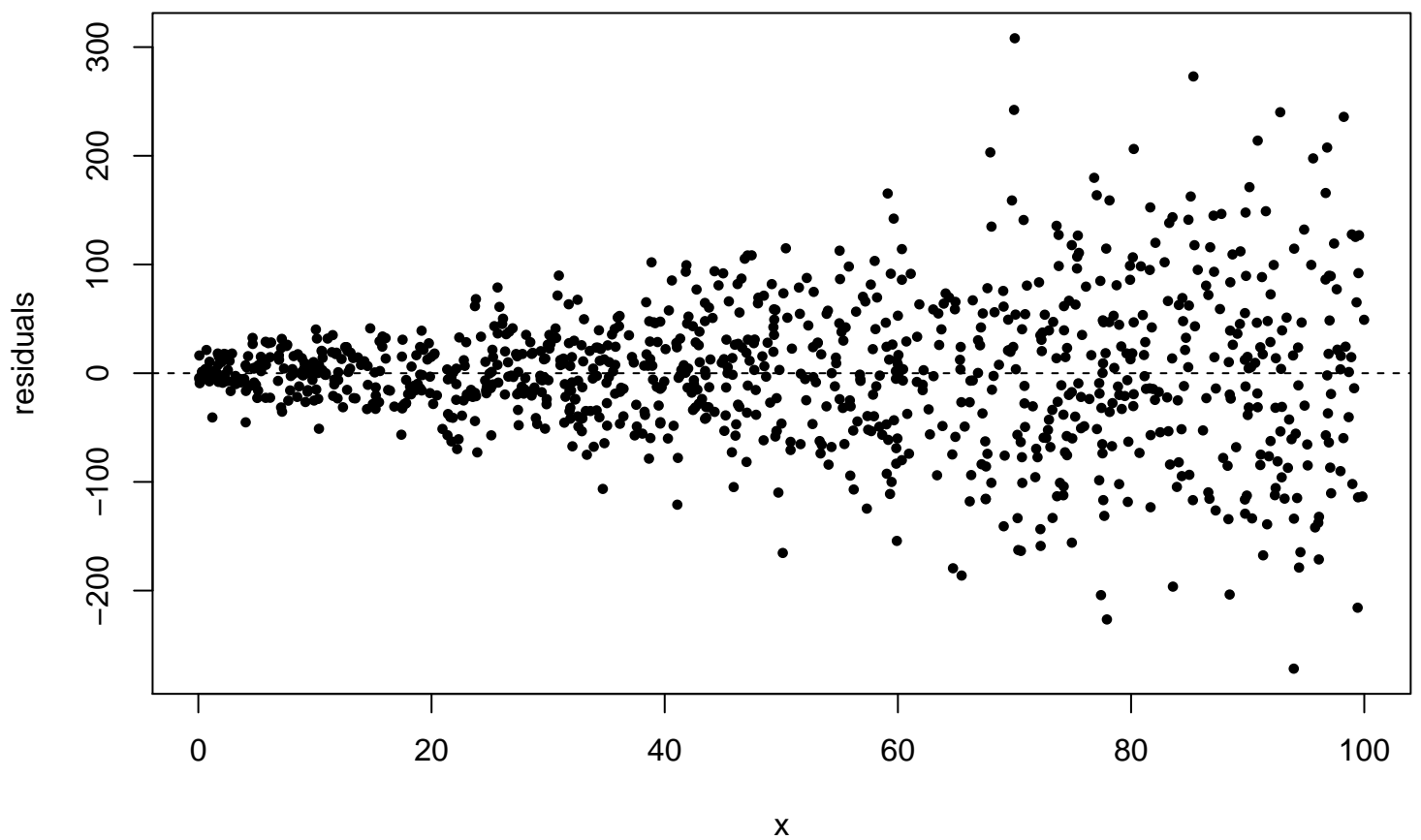# Incorrect straight line assumption

Original data

Residuals show curvilinear pattern vs x
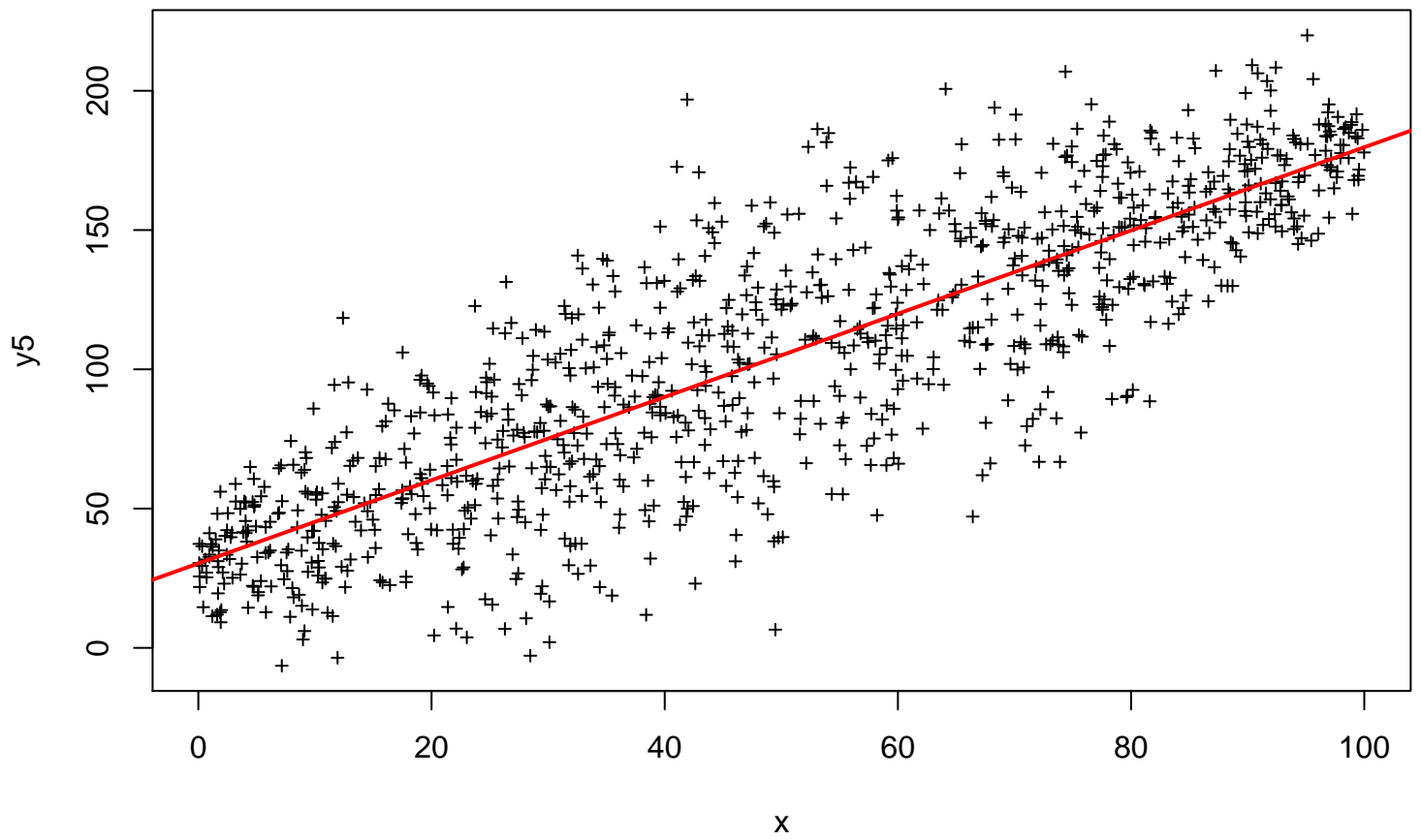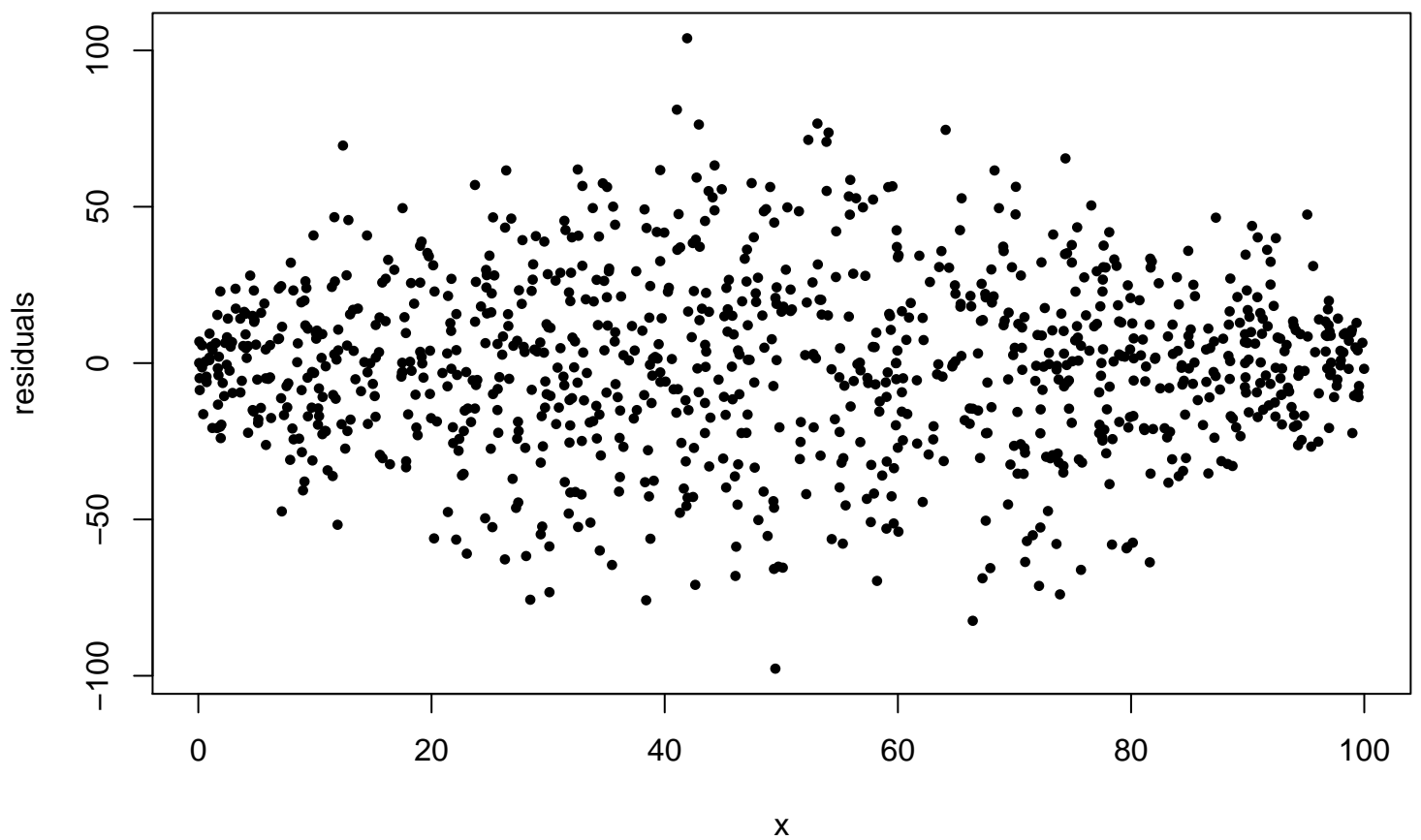# Incorrect straight line assumption

Original data

Residuals show parabolic pattern vs x
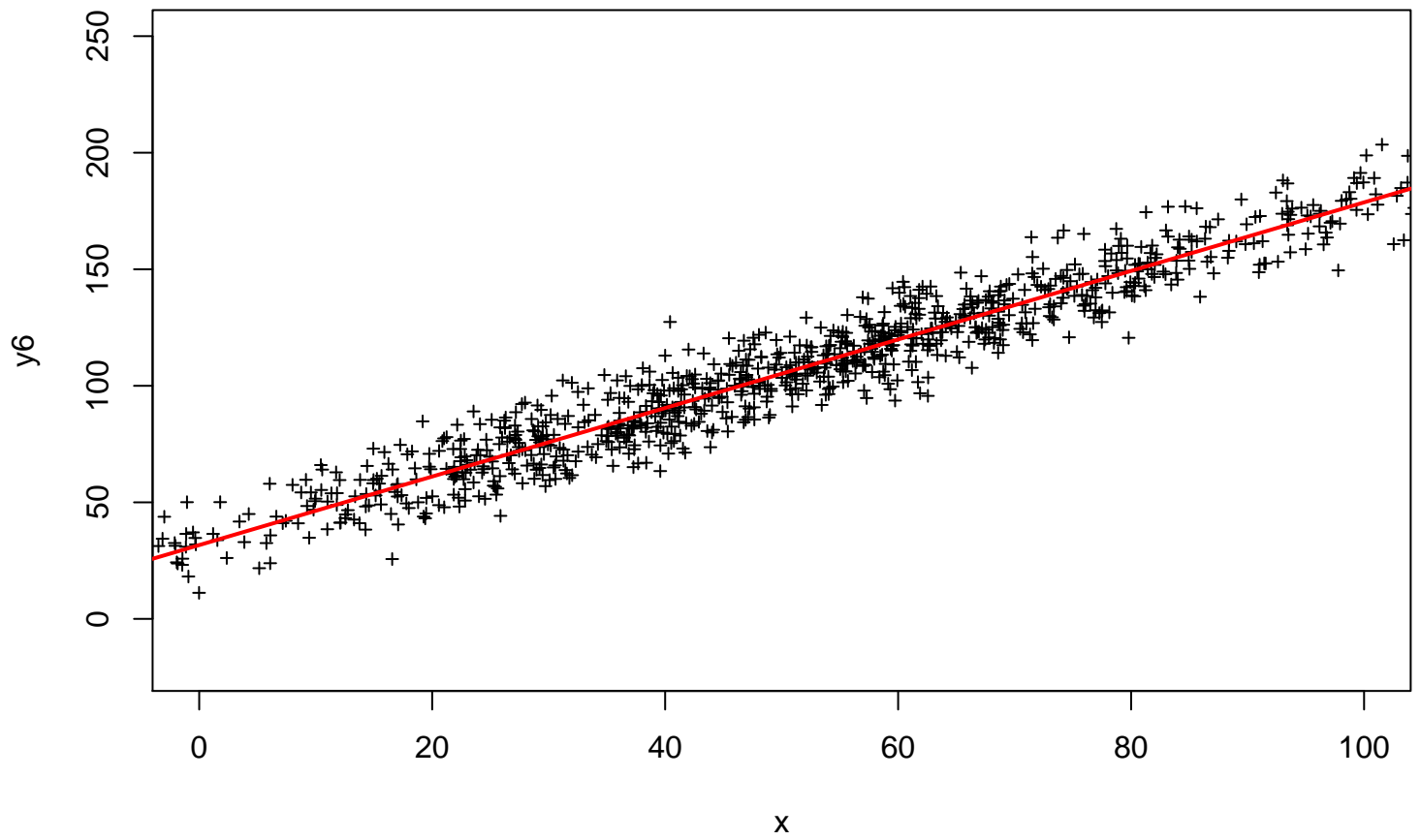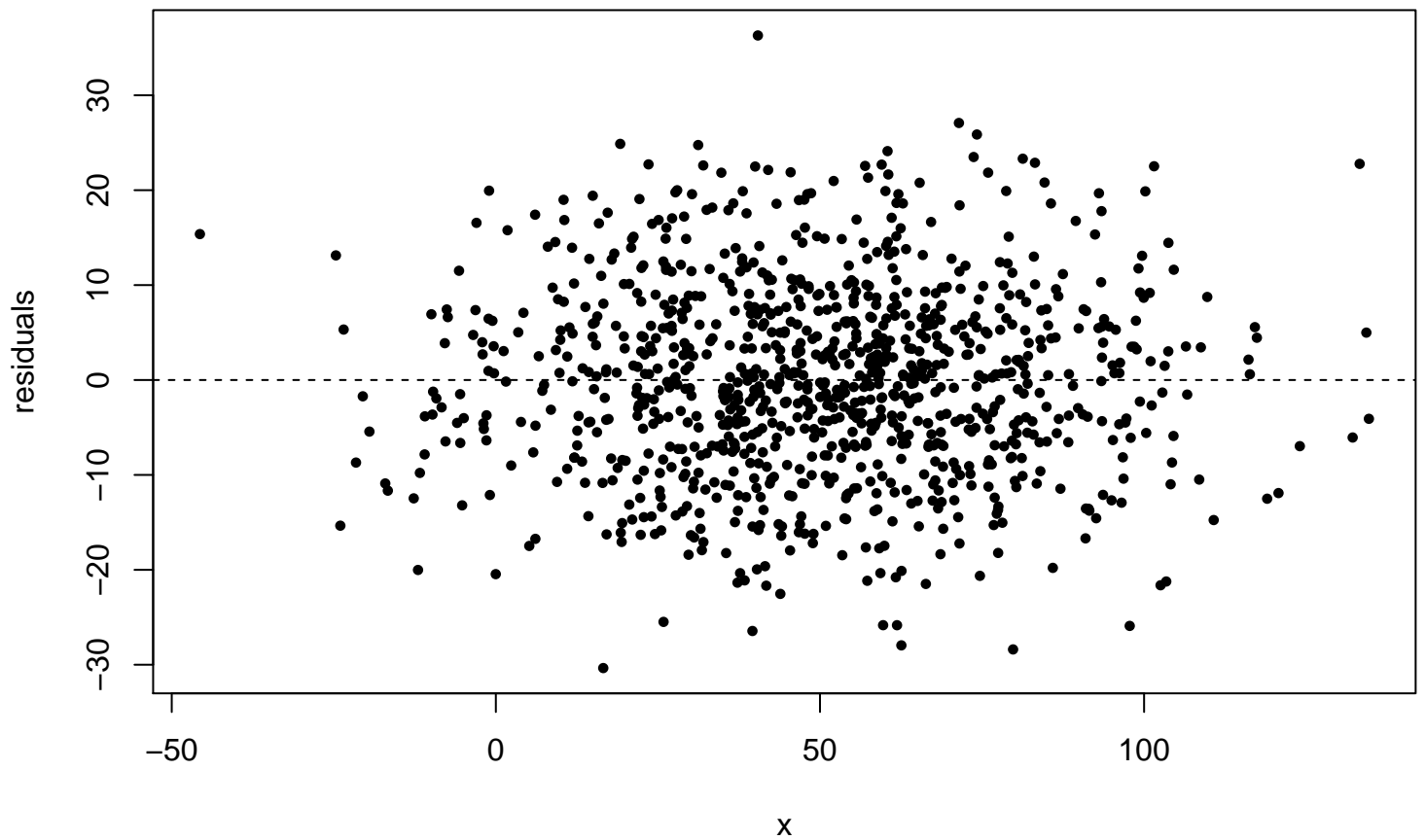# Incorrect constant variance assumption

Original data

Residuals show non−constant variance pattern vs x
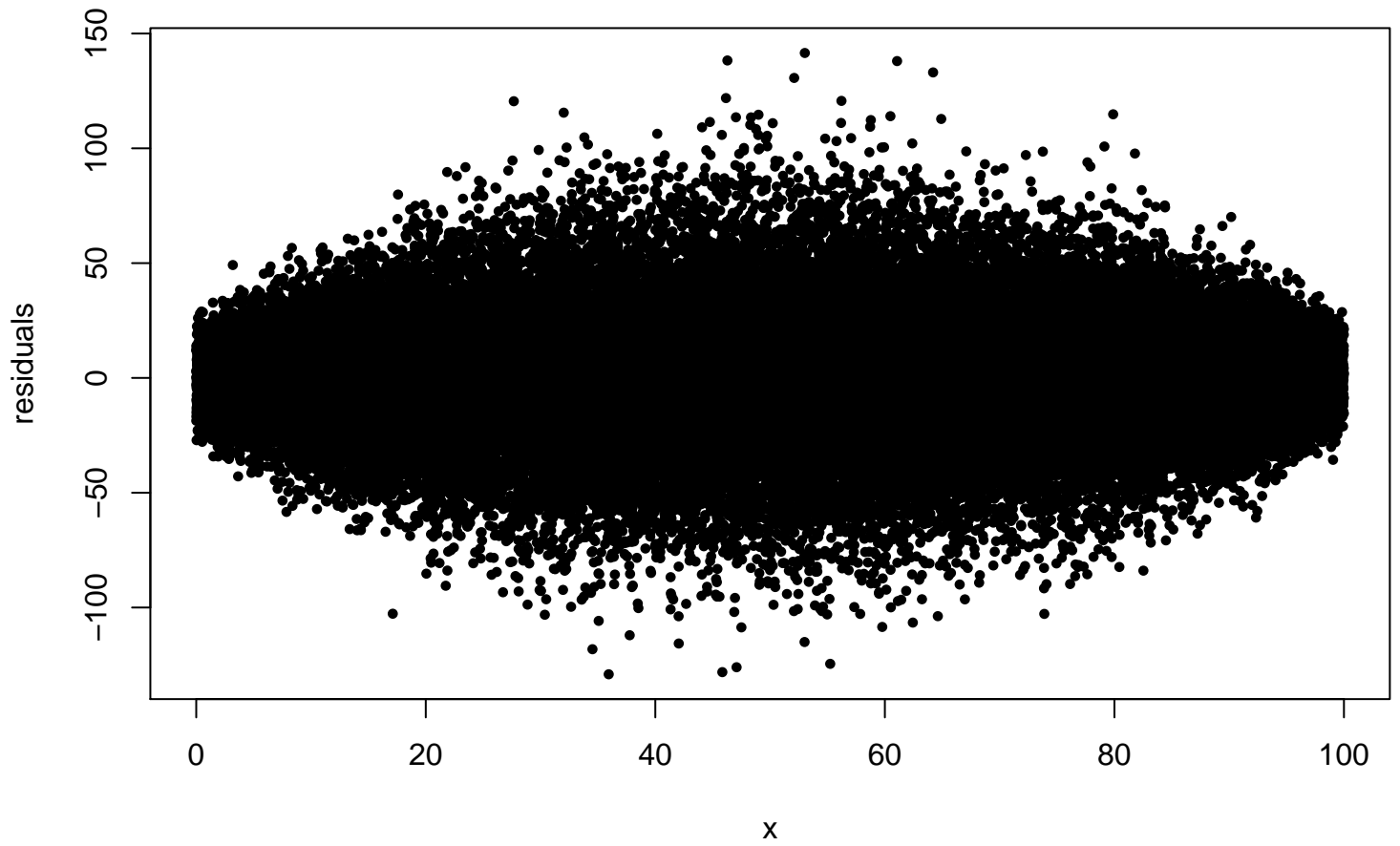**Incorrect constant variance assumption**
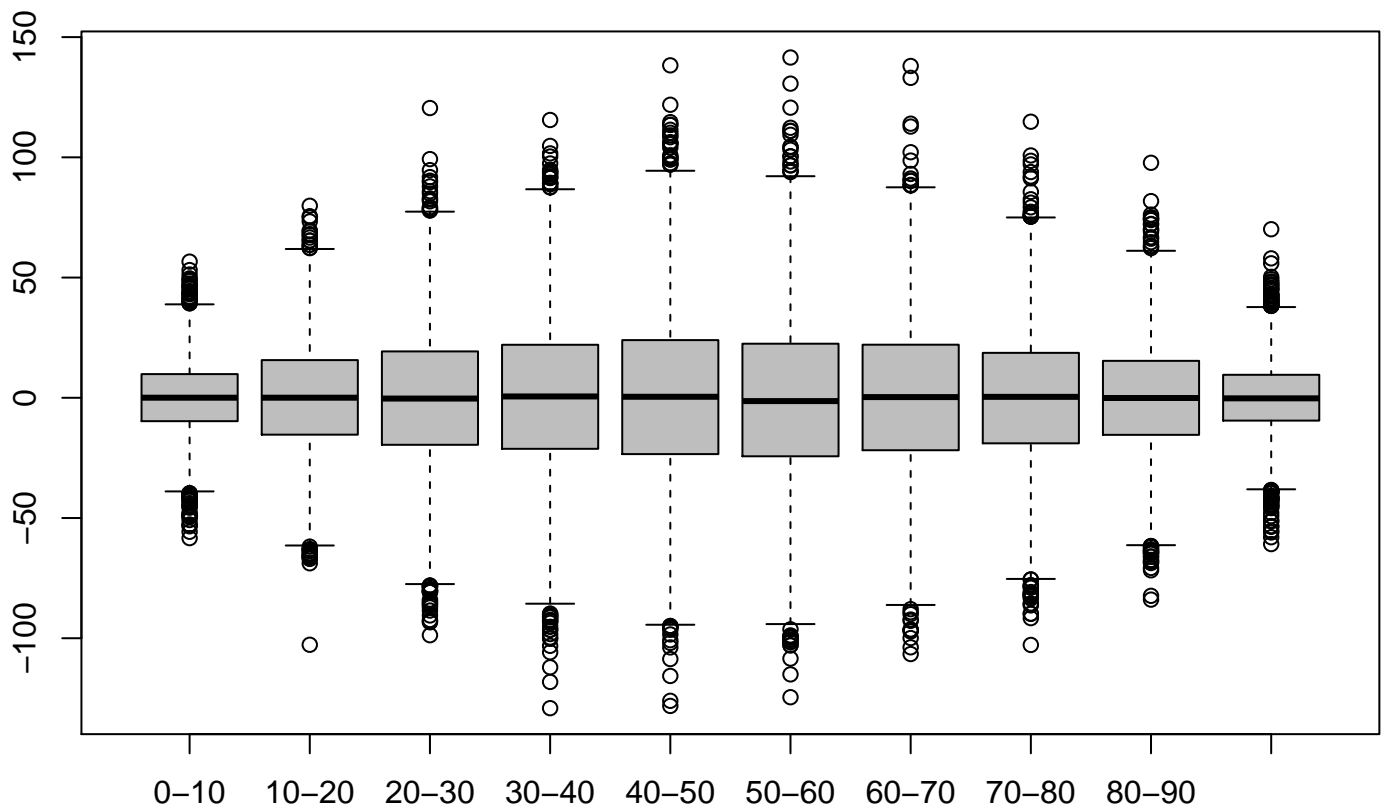
Original data

Residuals show no pattern vs x
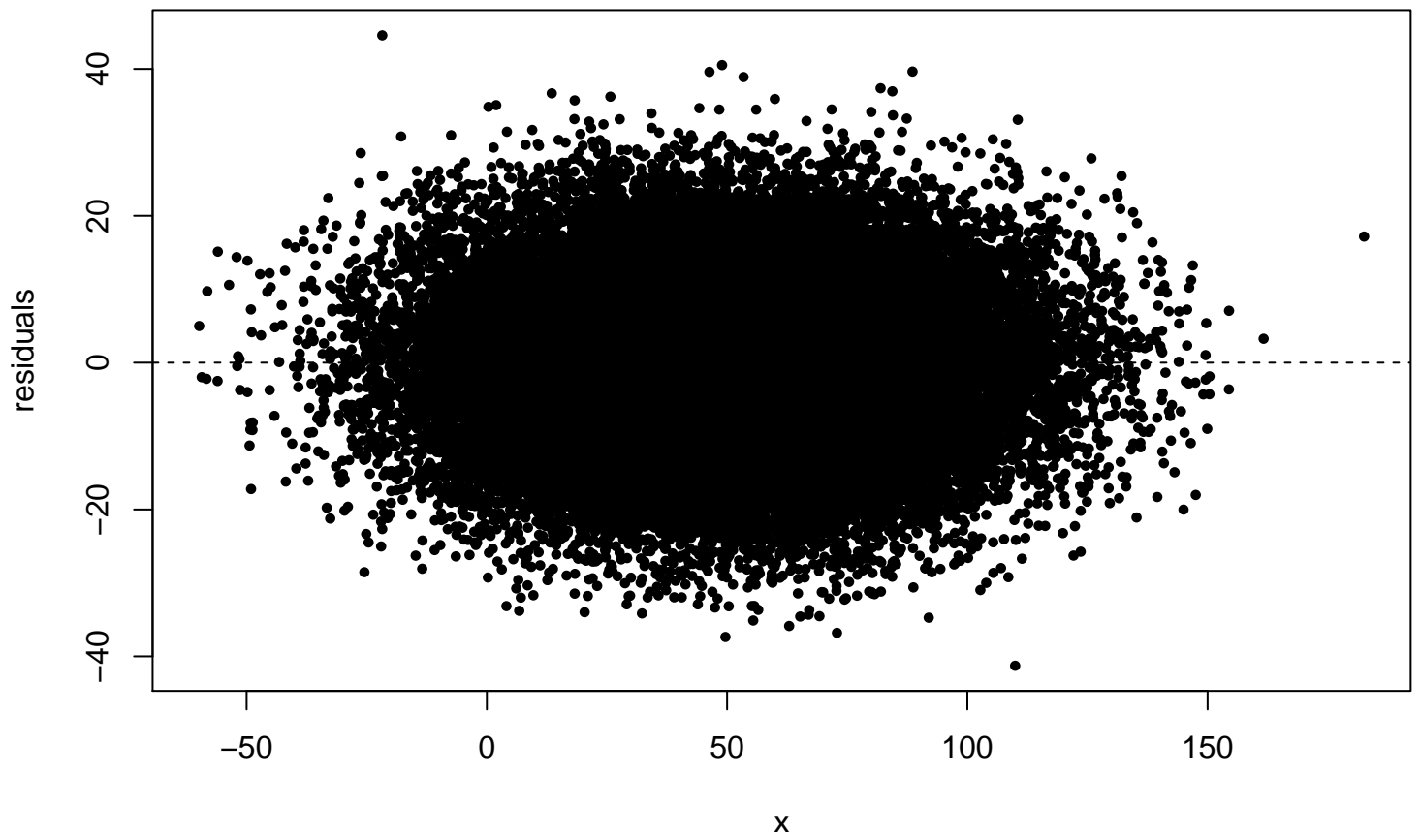**Straight line assumption correct**

Larger sample size (50000)
Incorrect constant variance assumption

Residuals show non−constant variance pattern in boxplot

Larger sample size (50000)
Straight line assumption correct

Residuals show constant variance pattern in boxplot