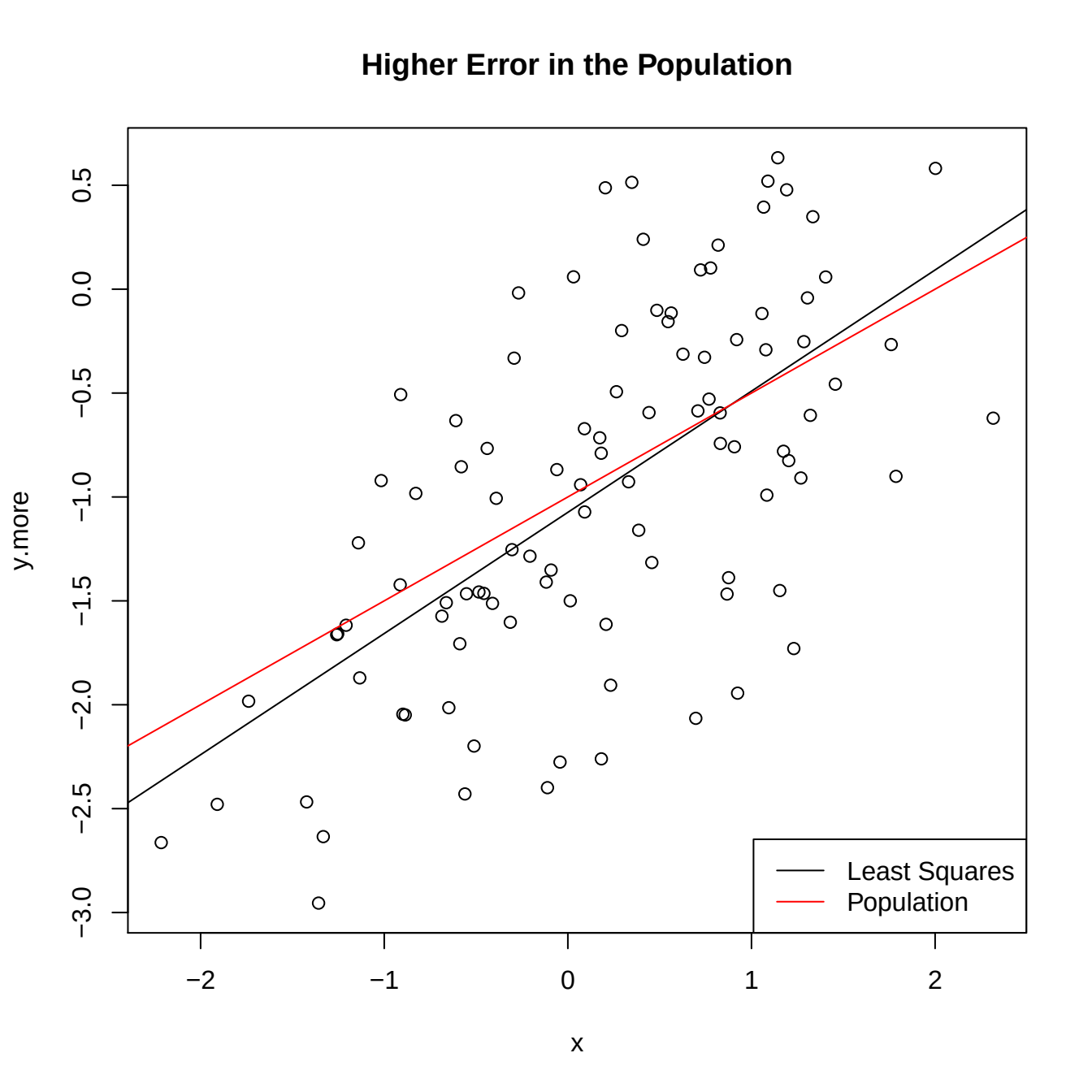
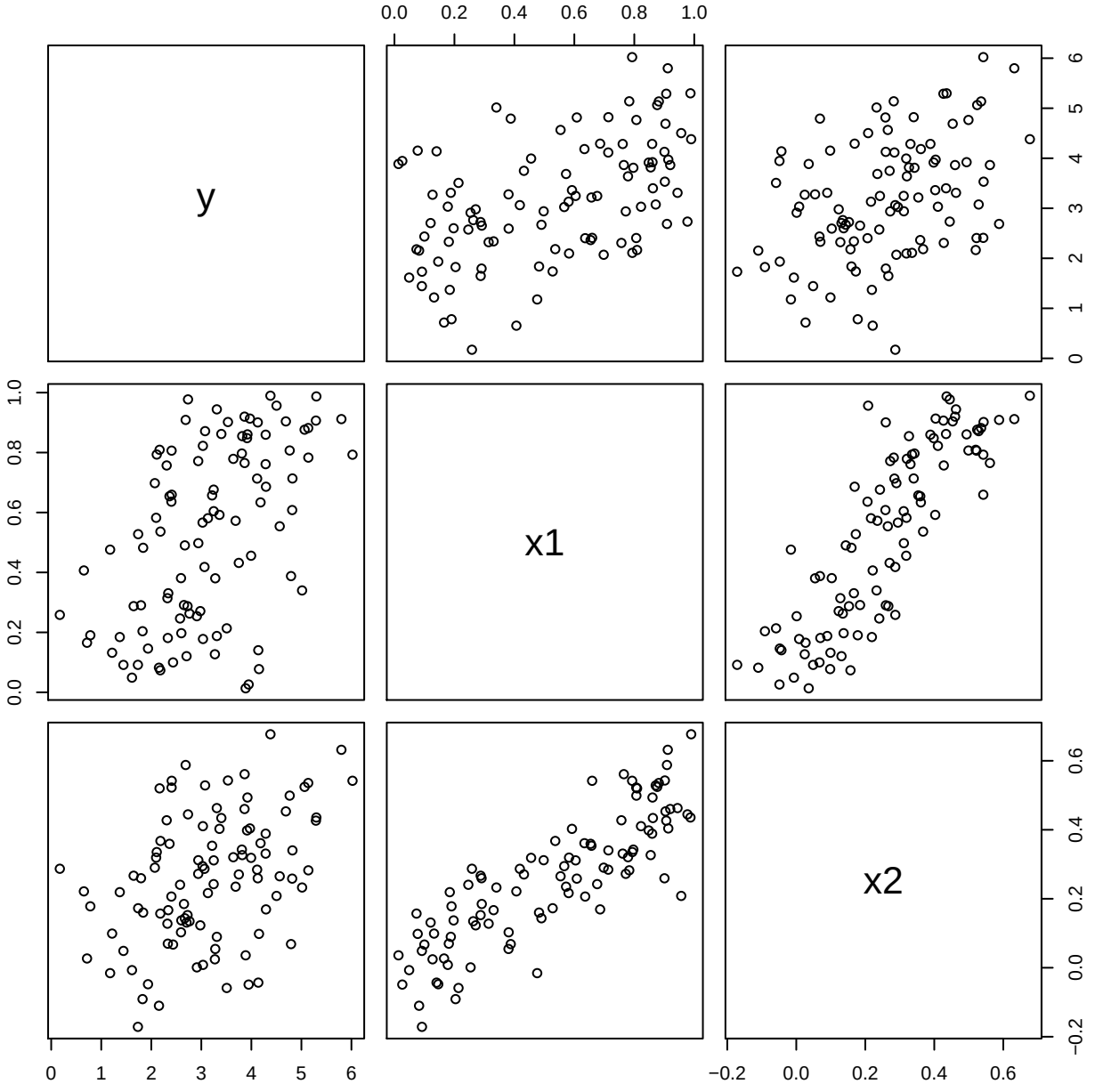
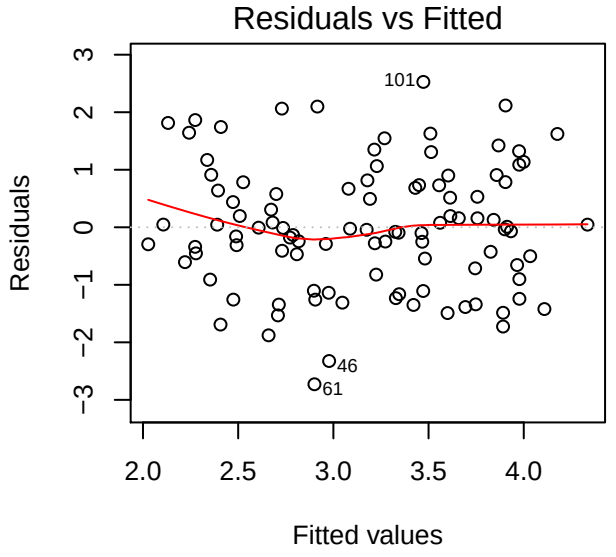
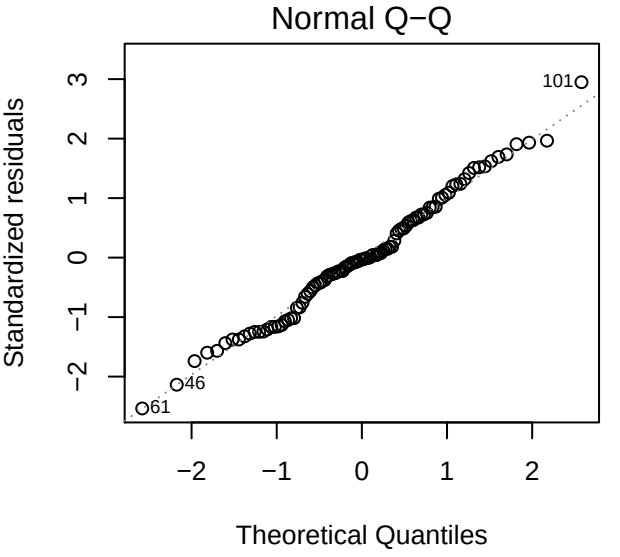
Moderate Error in the Population
y
x
1.0
0.5
0.0
−0.5
−1.0
−1.5
−2.0
−2.5
−2
−1
0
1
2
Least Squares
Population

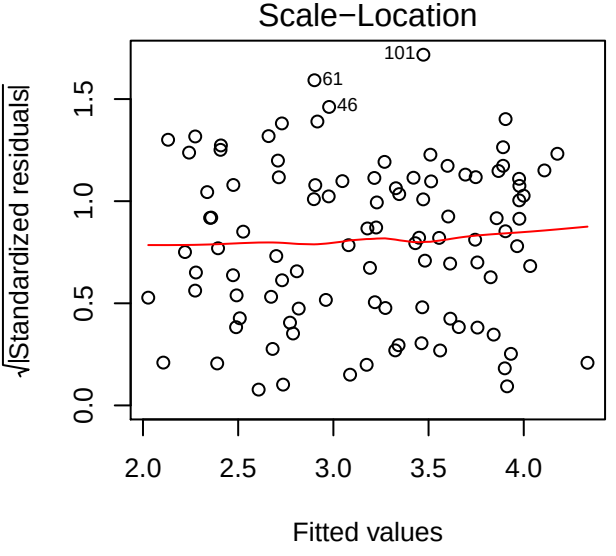
Less Error in the Population
y.less
0.5
0.0
−0.5
−1.0
−1.5
−2.0
−2
−1
0
1
2
x
Least Squares
Population

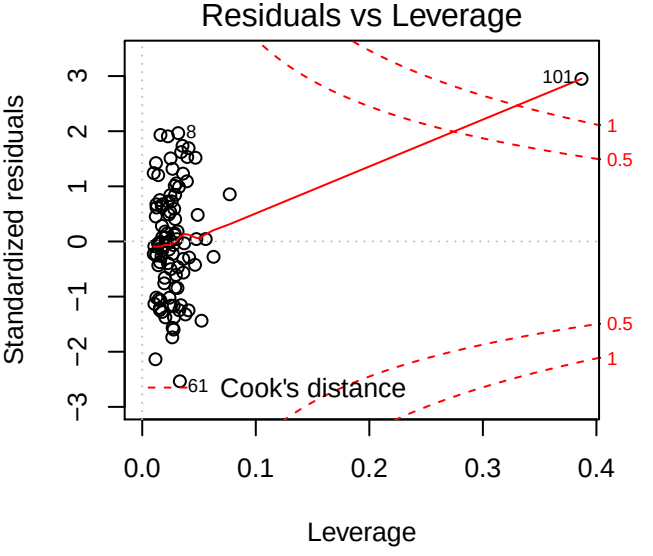

Higher Error in the Population
y.more
x
0.5
0.0
−0.5
−1.0
−1.5
−2.0
−2.5
−3.0
−2
−1
0
1
2
Least Squares
Population

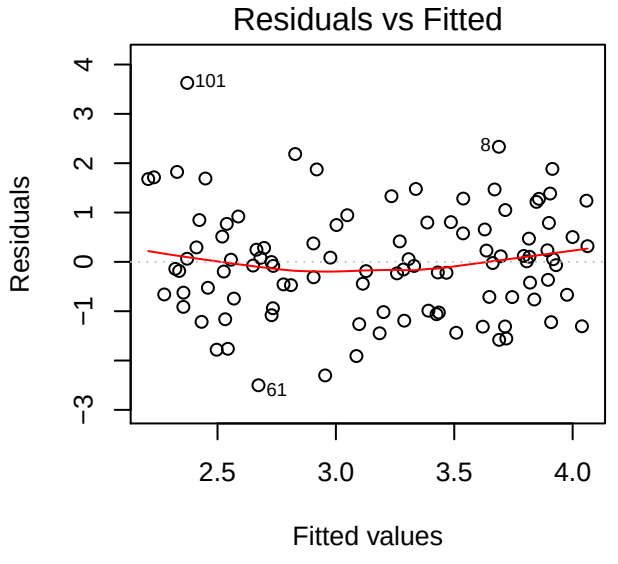

y
x1
x2
0.0
0.2
0.4
0.6
0.8
1.0
0
1
2
3
4
5
6
−0.2
0.0
0.2
0.4
0.6

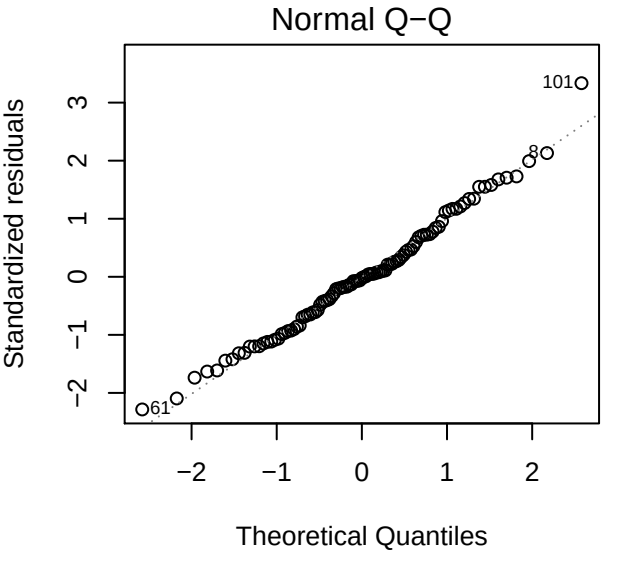

Residuals vs Fitted
Residuals
Fitted values
101
46
61

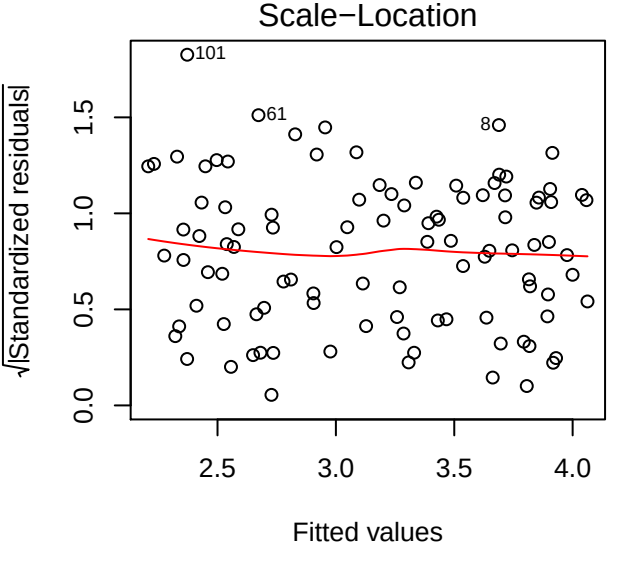

Normal Q−Q
Standardized residuals
Theoretical Quantiles
101
46
61

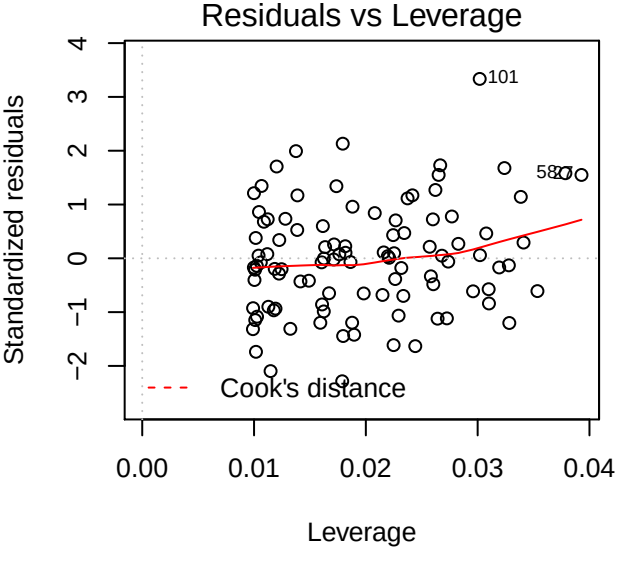

Scale−Location
√|Standardized residuals|
Fitted values
101
61
46

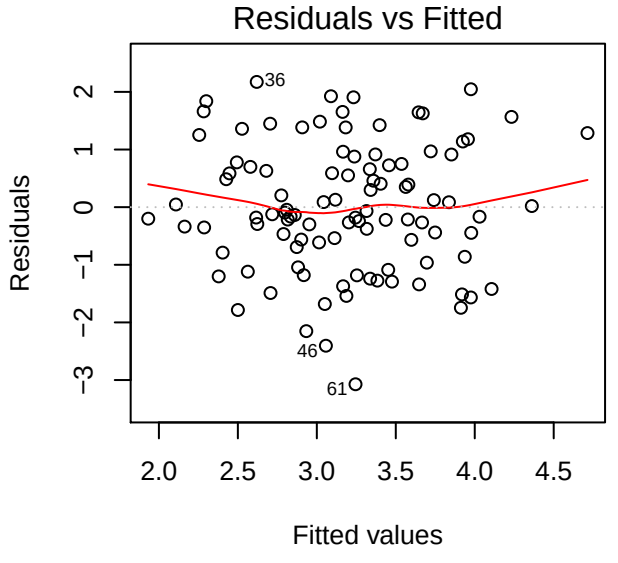

Residuals vs Leverage
Standardized residuals
Leverage
Cook's distance
101
8
61
1
0.5
0.5
1

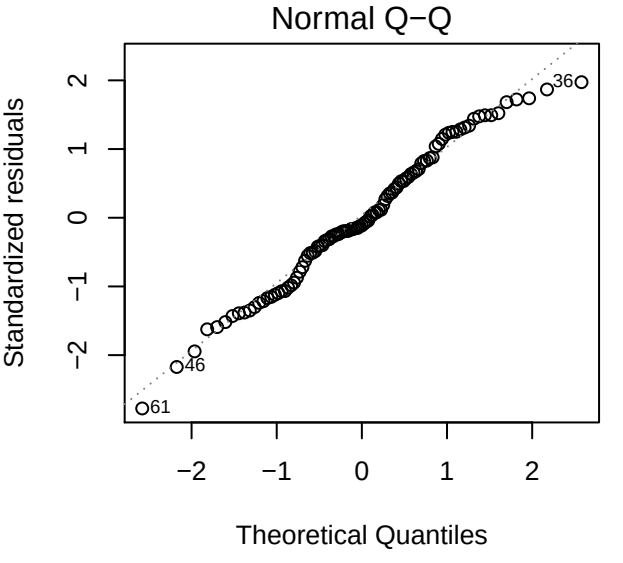

Residuals vs Fitted
Residuals
Fitted values
101
8
61
−3
−1
0
1
2
3
4
2.5
3.0
3.5
4.0

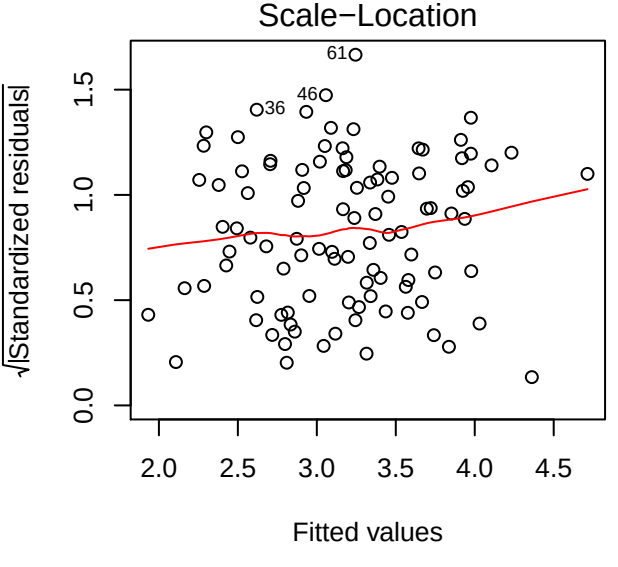

Normal Q−Q
Standardized residuals
Theoretical Quantiles
101
8
61
−2
−1
0
1
2
3

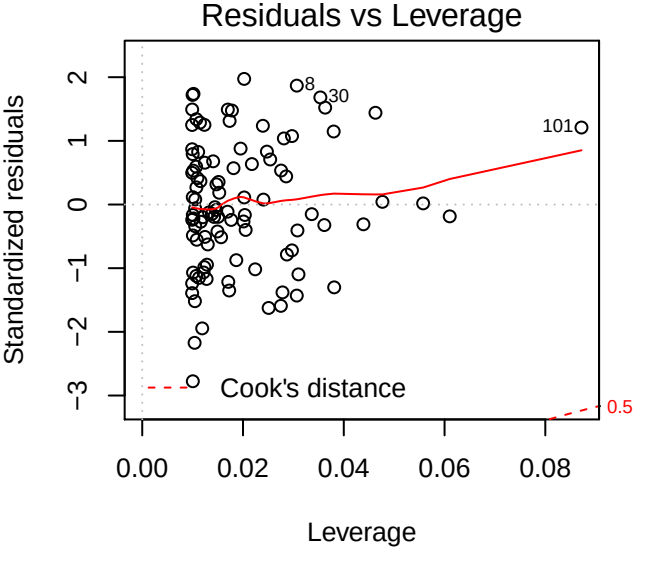

Scale−Location
√|Standardized residuals|
Fitted values
101
61
8
0.0
0.5
1.0
1.5
2.5
3.0
3.5
4.0

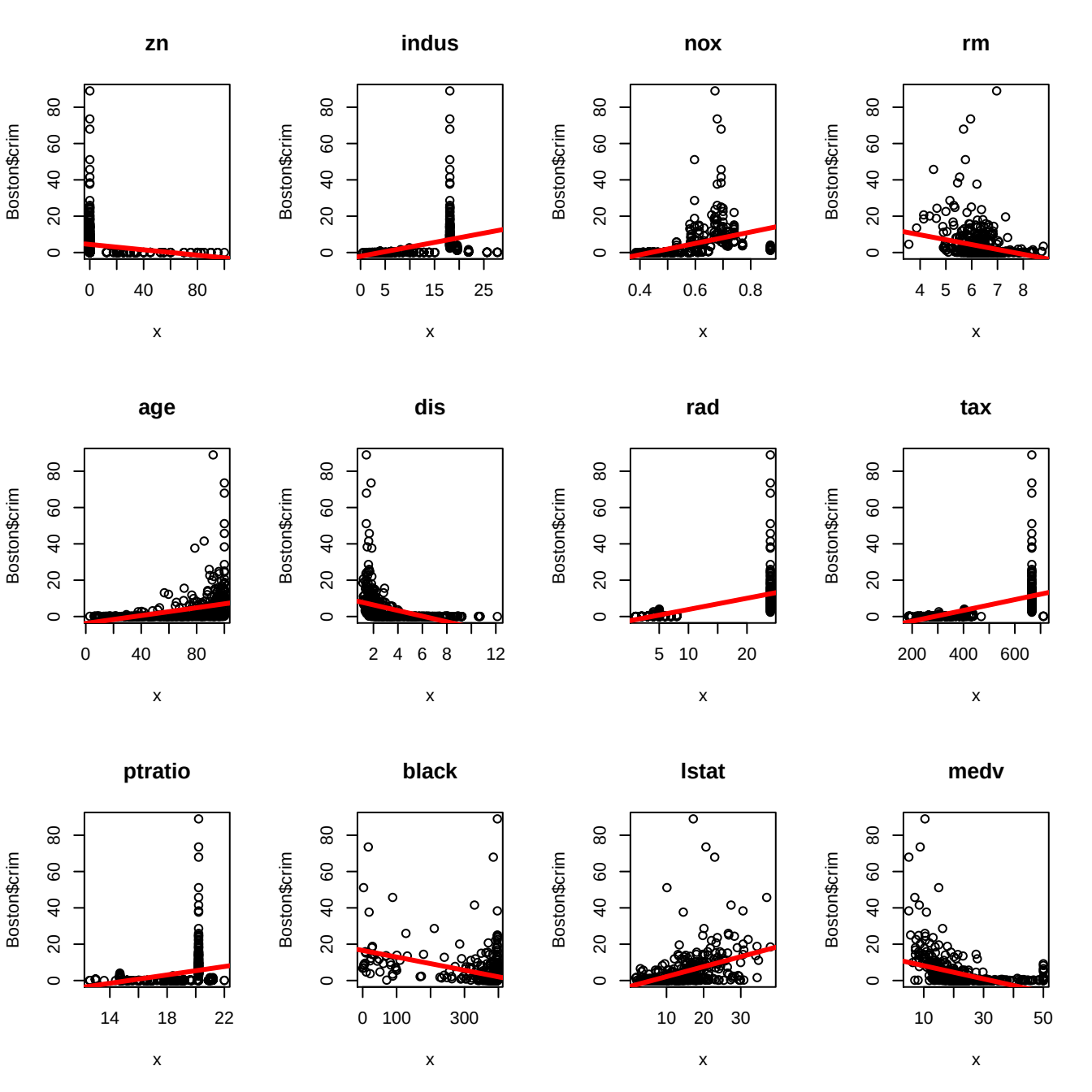

Residuals vs Leverage
Standardized residuals
Leverage
Cook's distance
101
58
7
−2
−1
0
1
2
3
4
0.00
0.01
0.02
0.03
0.04


Residuals vs Fitted
Residuals
Fitted values
36
46
61


Normal Q−Q
Standardized residuals
Theoretical Quantiles
36
46
61


Scale−Location
√|Standardized residuals|
Fitted values
61
46
36


Residuals vs Leverage
Standardized residuals
Leverage
8
30
101
Cook's distance
0.5


zn
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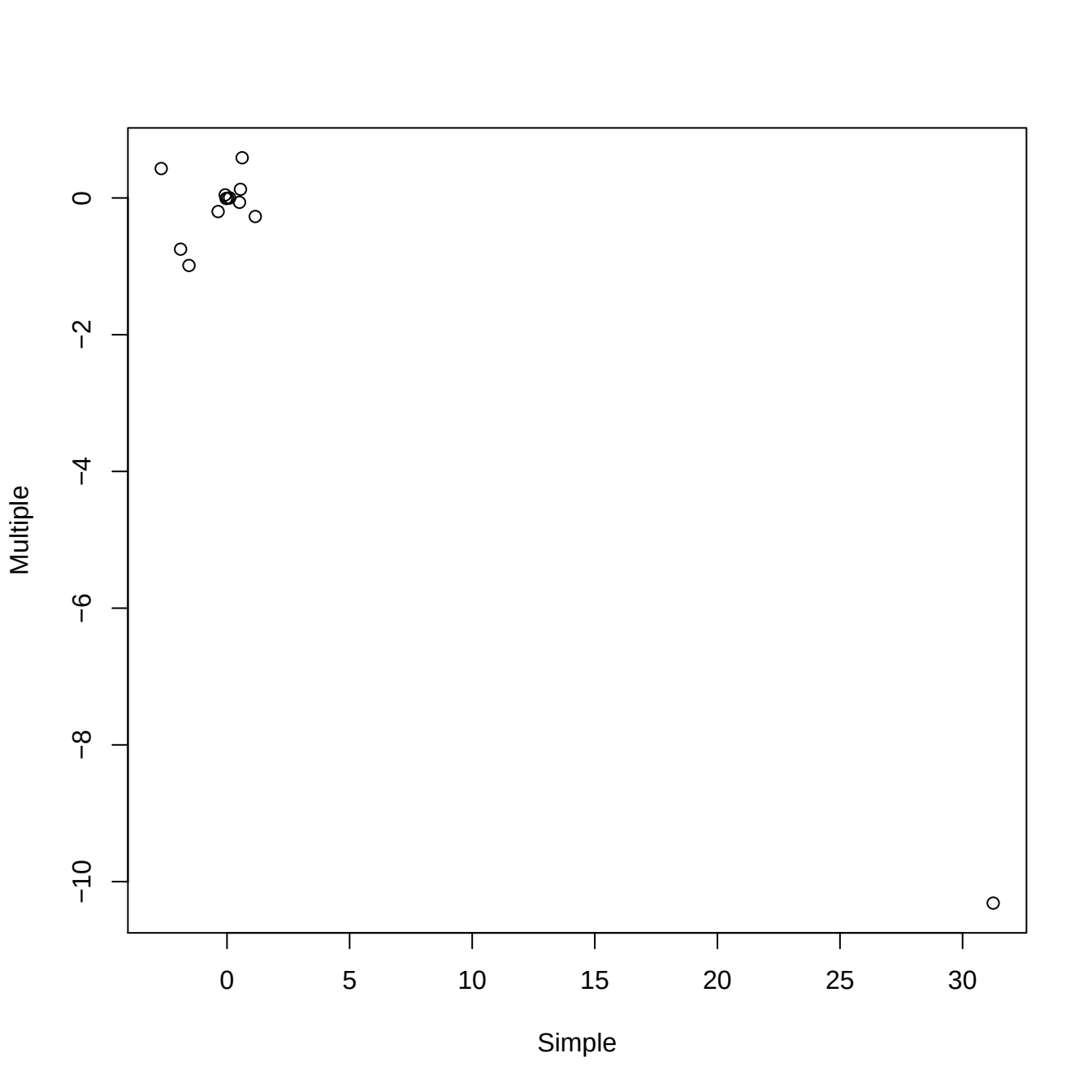
black
lstat
medv
Boston$crim
x


Multiple
0
−2
−4
−6
−8
−10
0
5
10
15
20
25
30
Simple