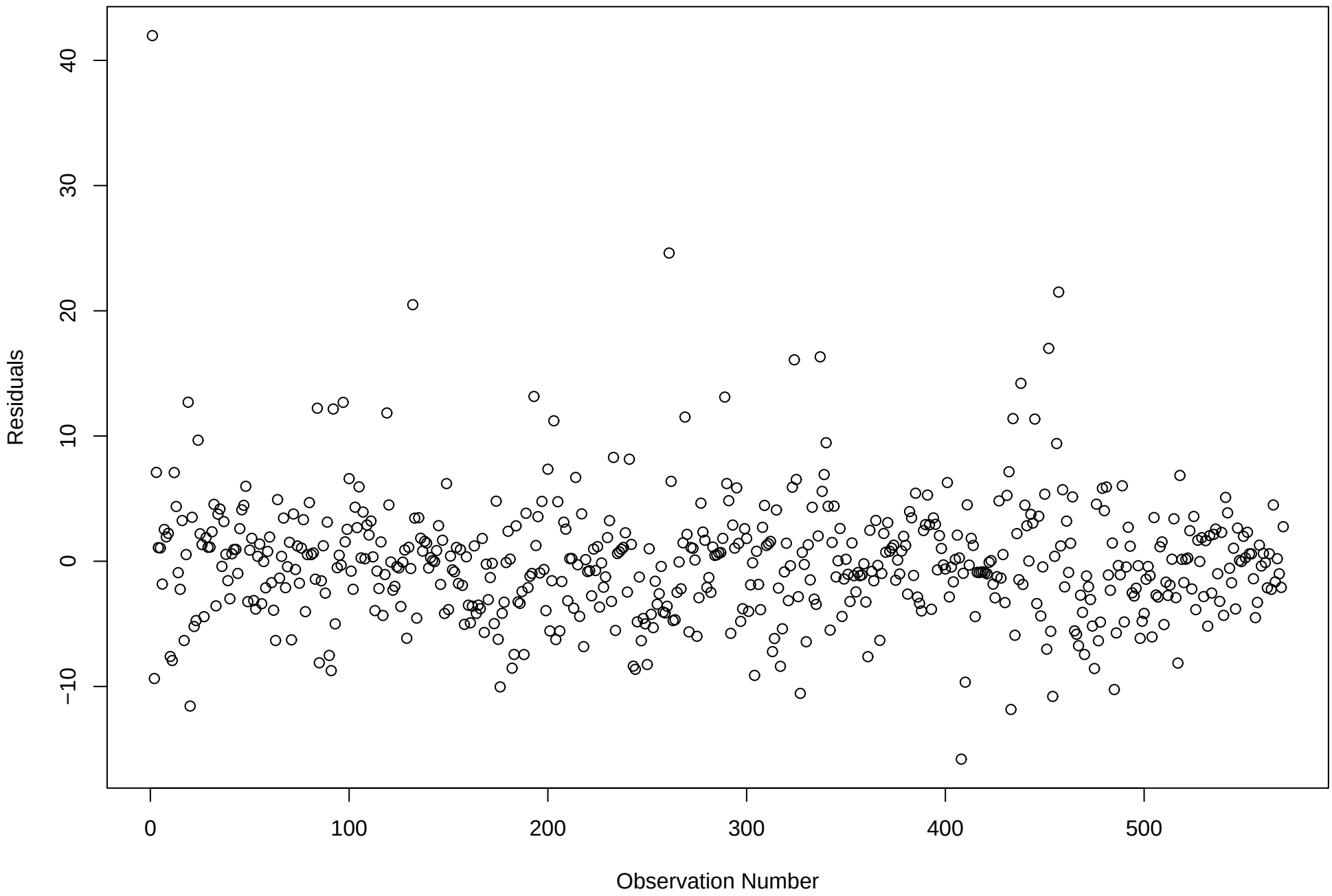
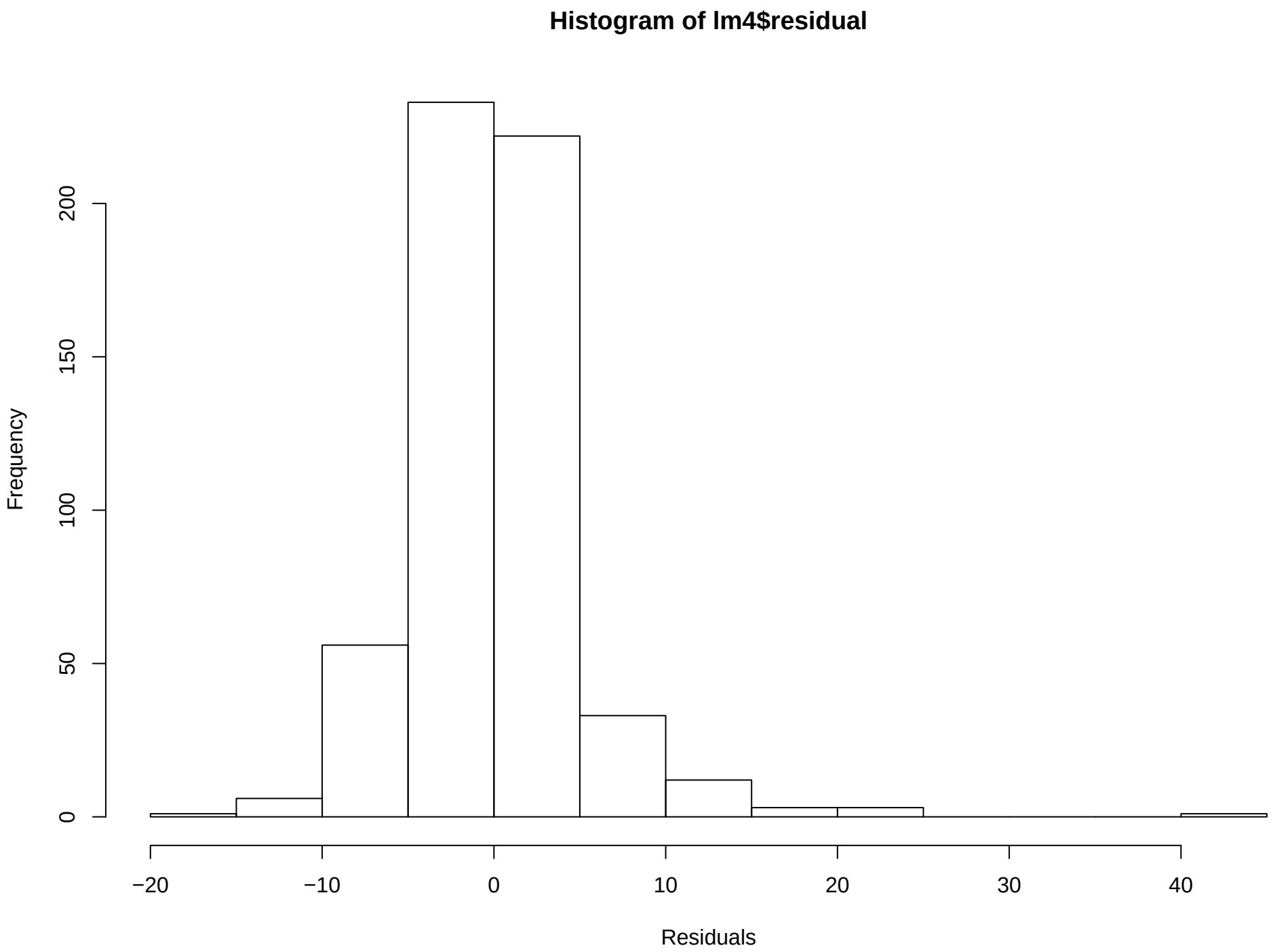
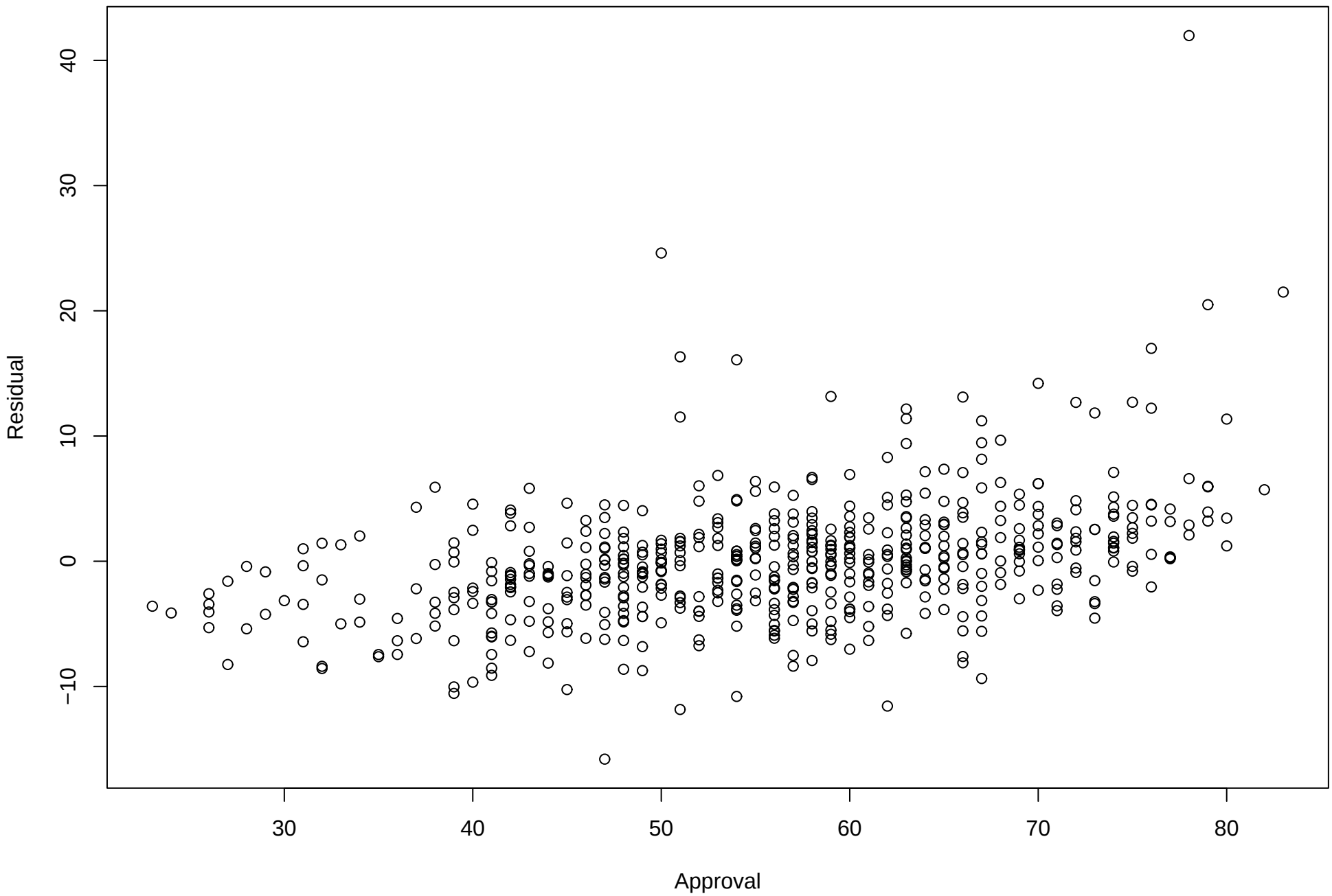
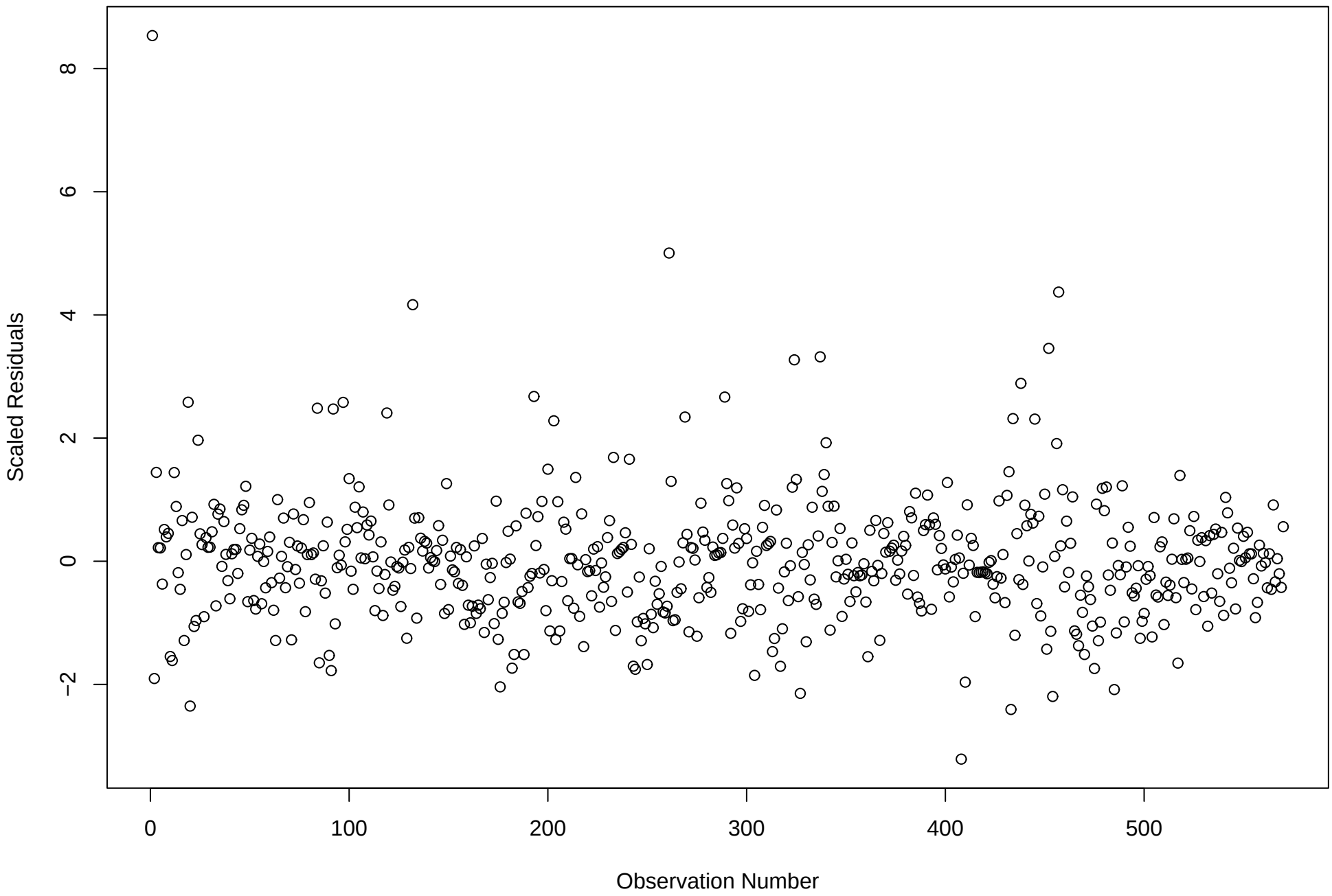
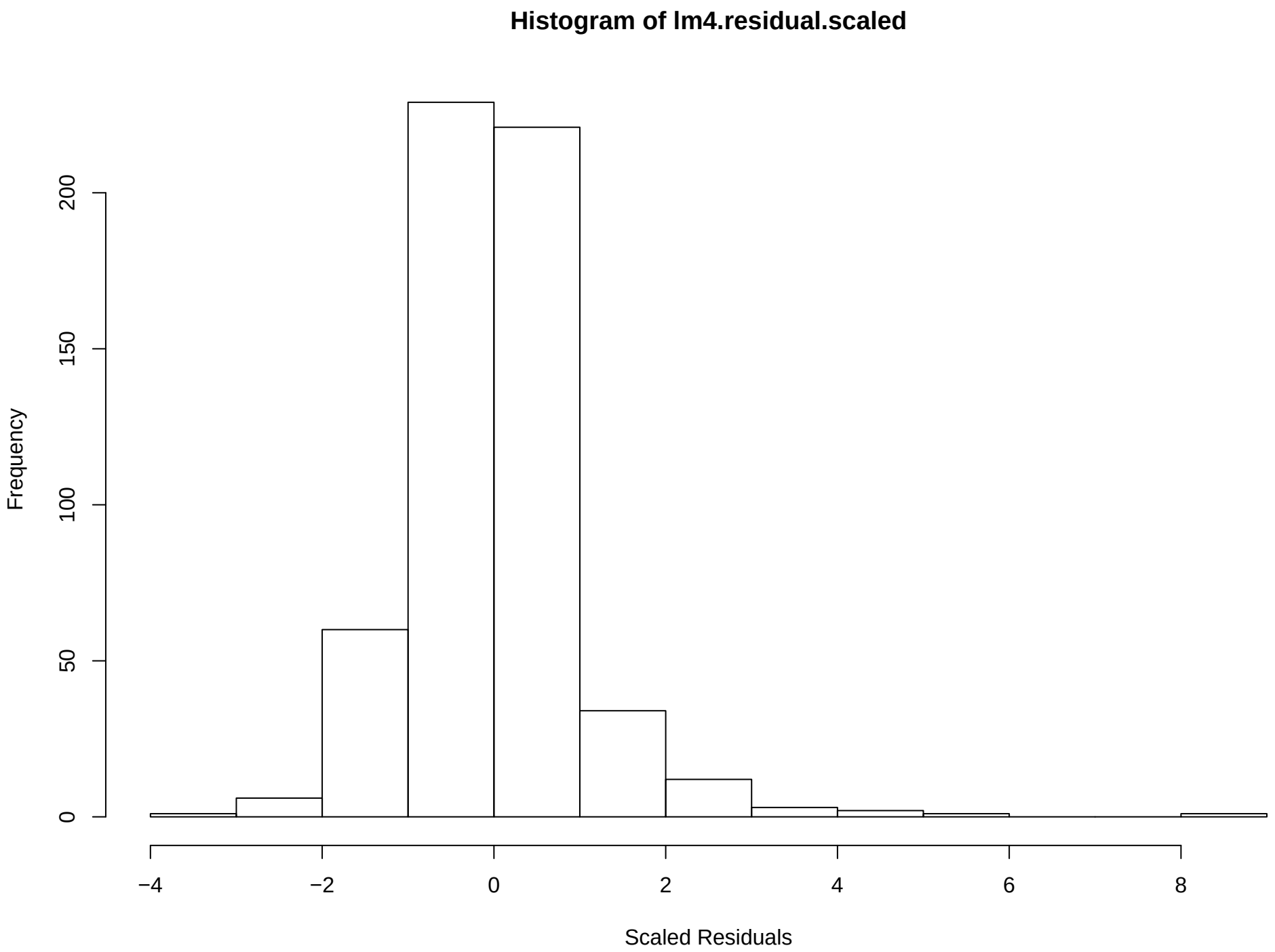
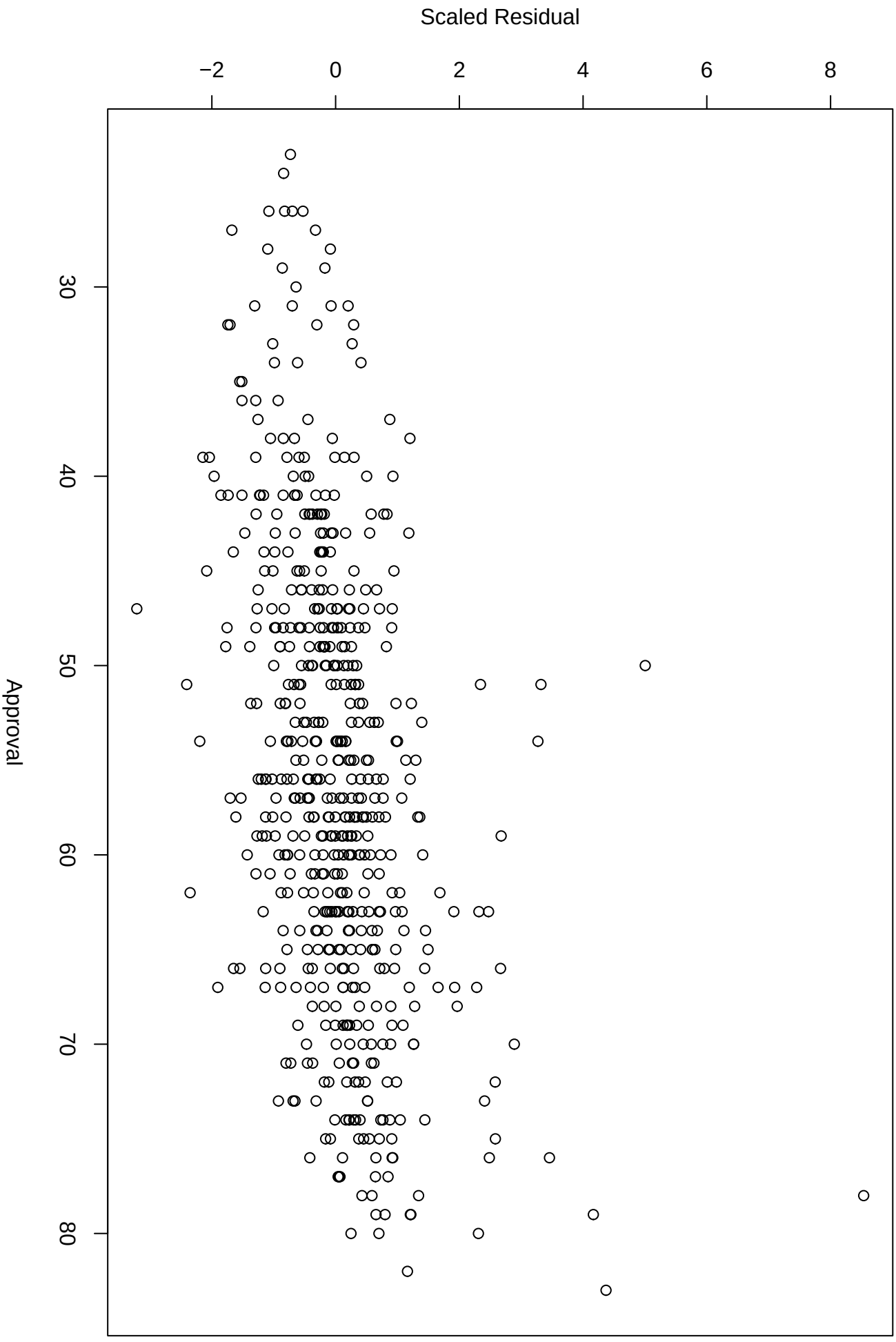

Residuals
40
30
20
10
0
−10
0
100
200
300
400
500
Observation Number

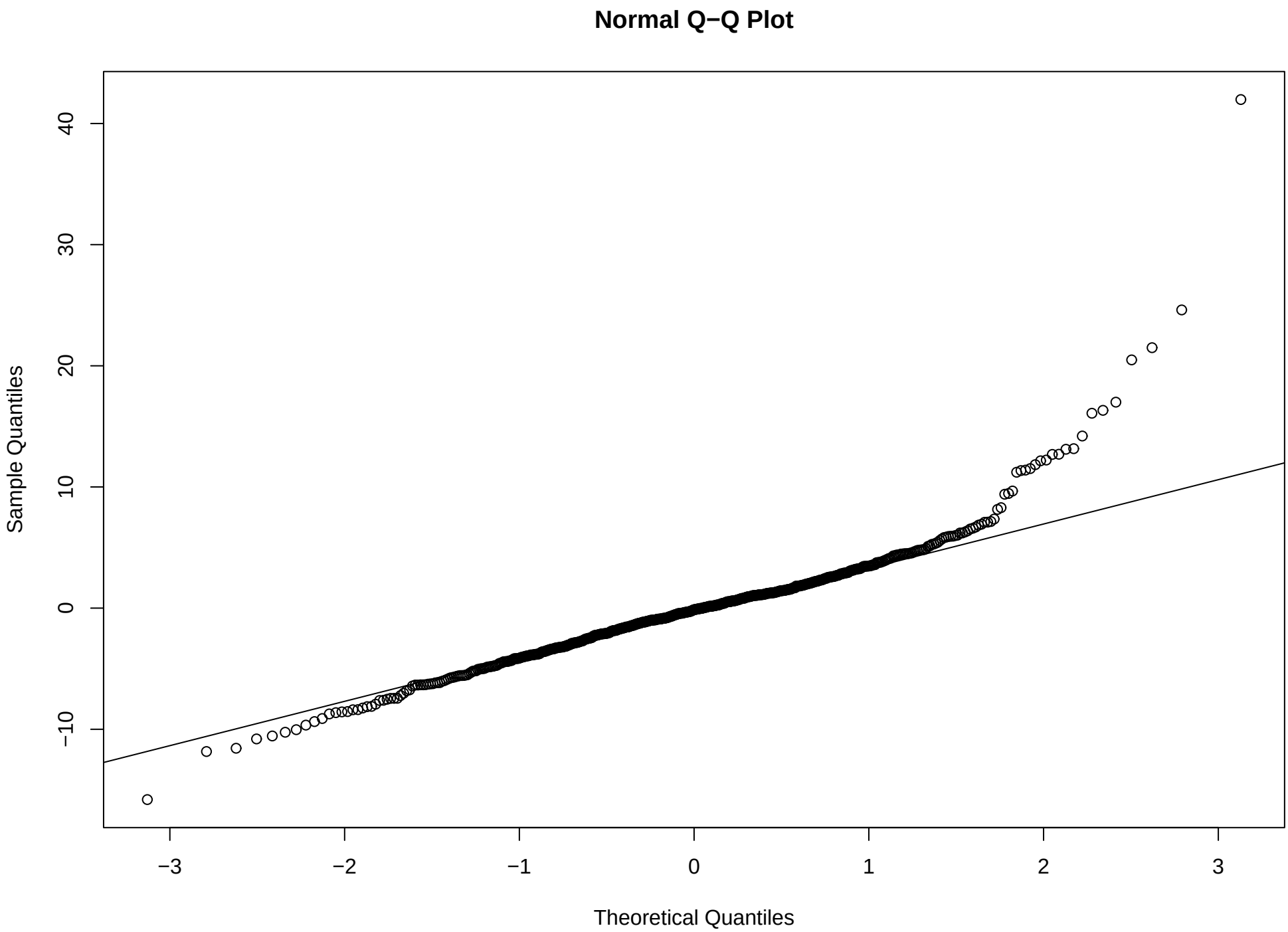

Histogram of lm4$residual
Frequency
0
50
100
150
200
−20
−10
0
10
20
30
40
Residuals

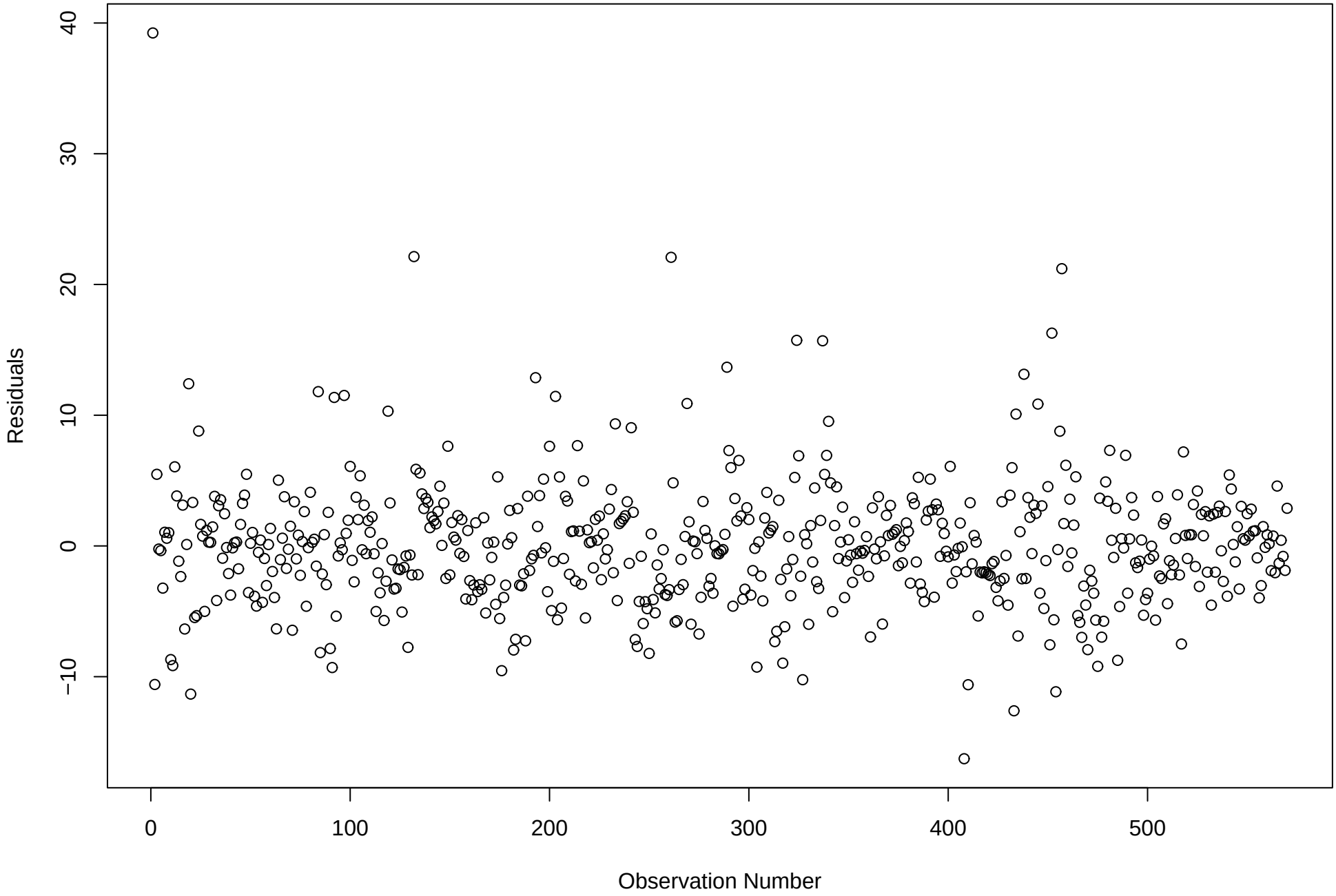

Residual
40
30
20
10
0
−10
30
40
50
60
70
80
Approval

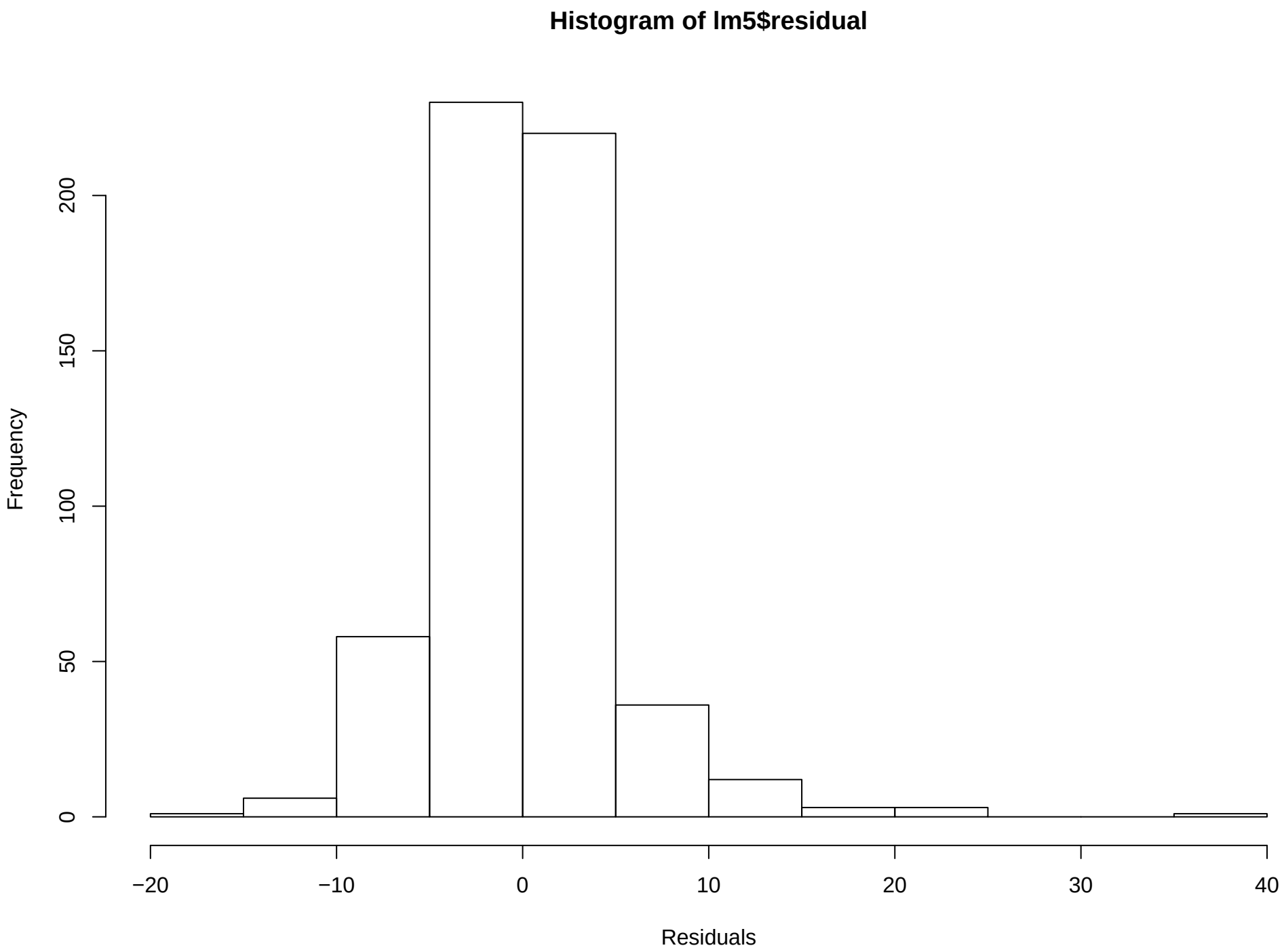

Scaled Residuals
8
6
4
2
0
−2
0
100
200
300
400
500
Observation Number

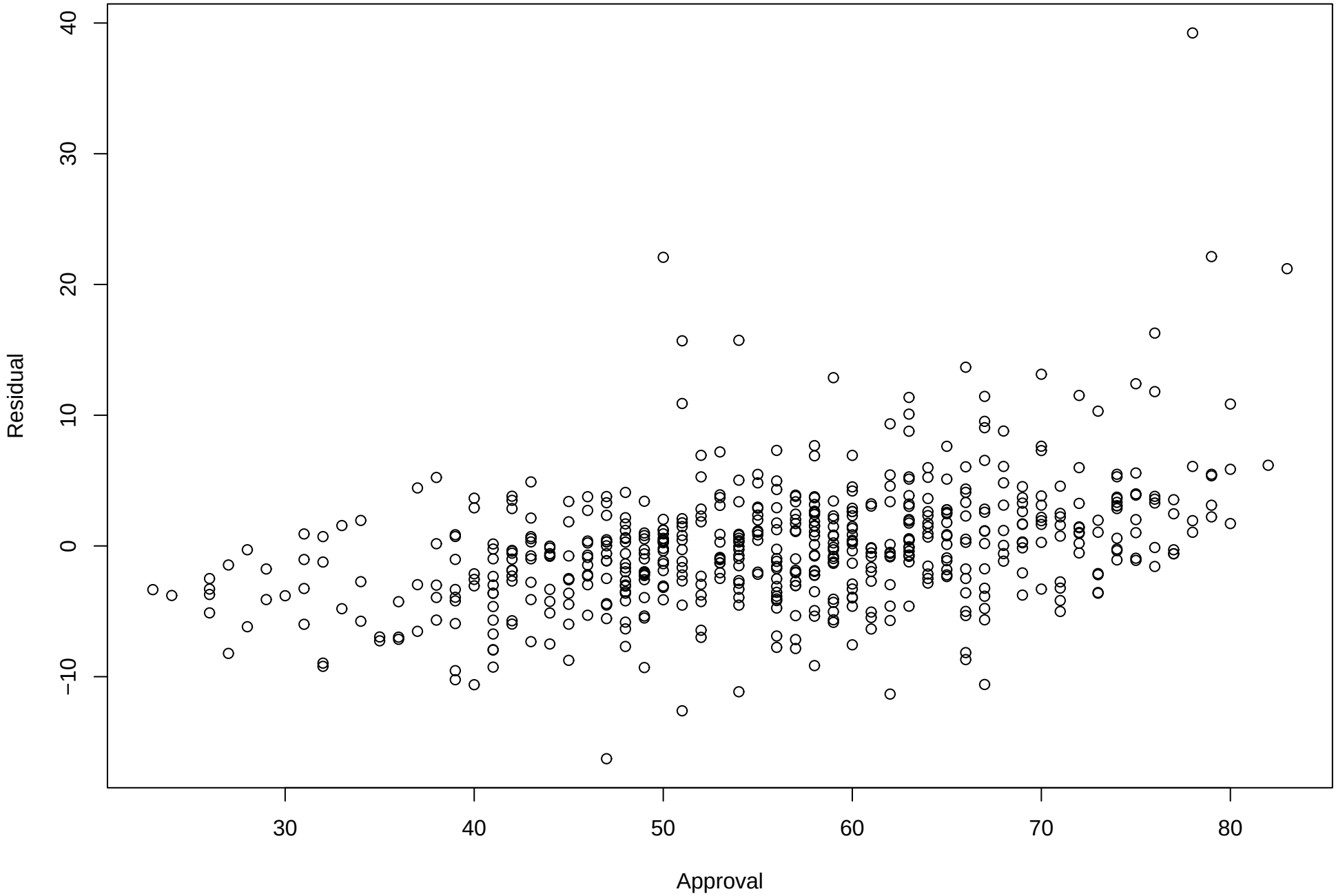

Histogram of lm4.residual.scaled
Frequency
0
50
100
150
200
−4
−2
0
2
4
6
8
Scaled Residuals

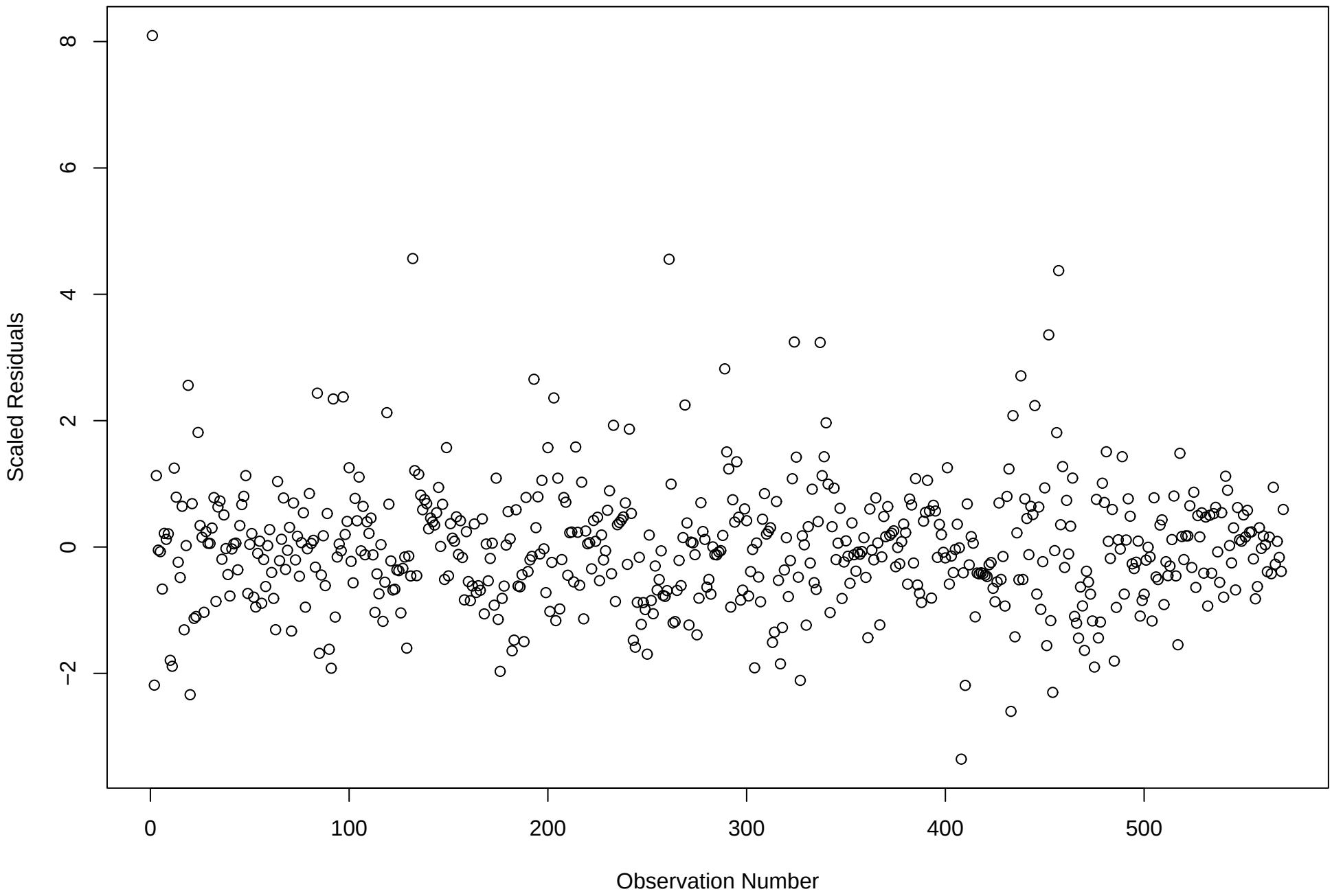

Scaled Residual
−2
0
2
4
6
8
Approval
30
40
50
60
70
80

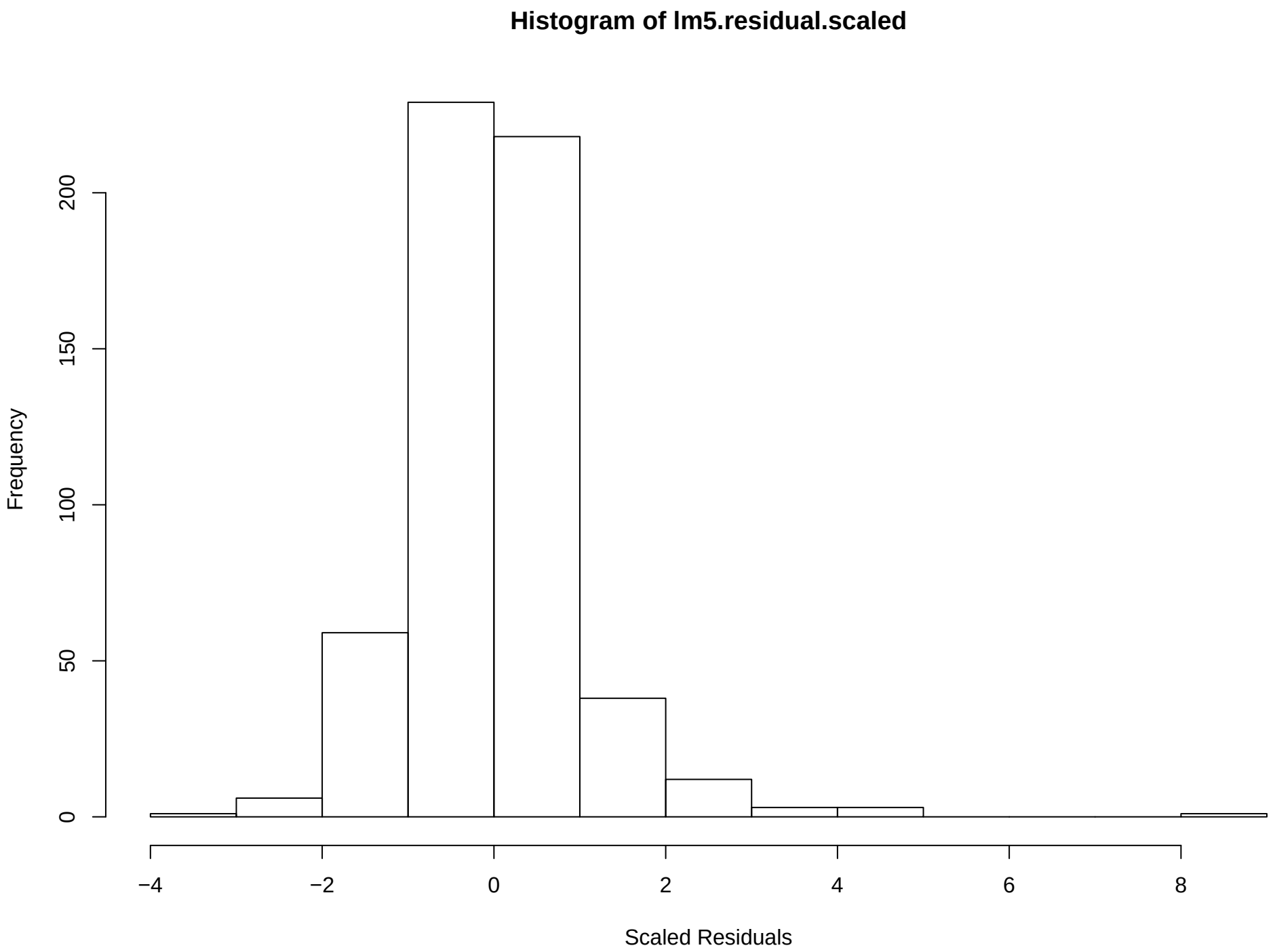

Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
40
30
20
10
0
−10
−3
−2
−1
0
1
2
3

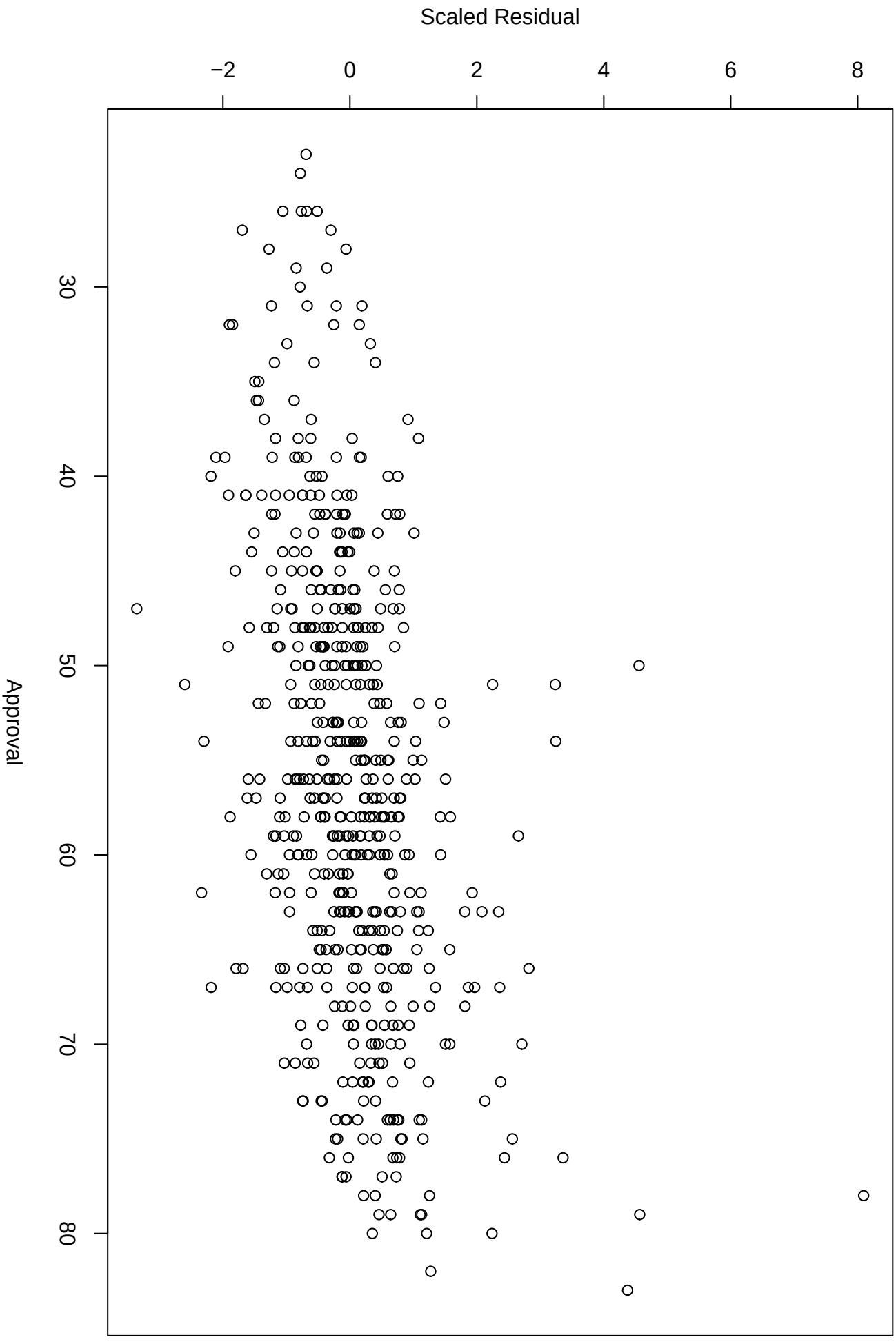

Residuals
40
30
20
10
0
−10
0
100
200
300
400
500
Observation Number

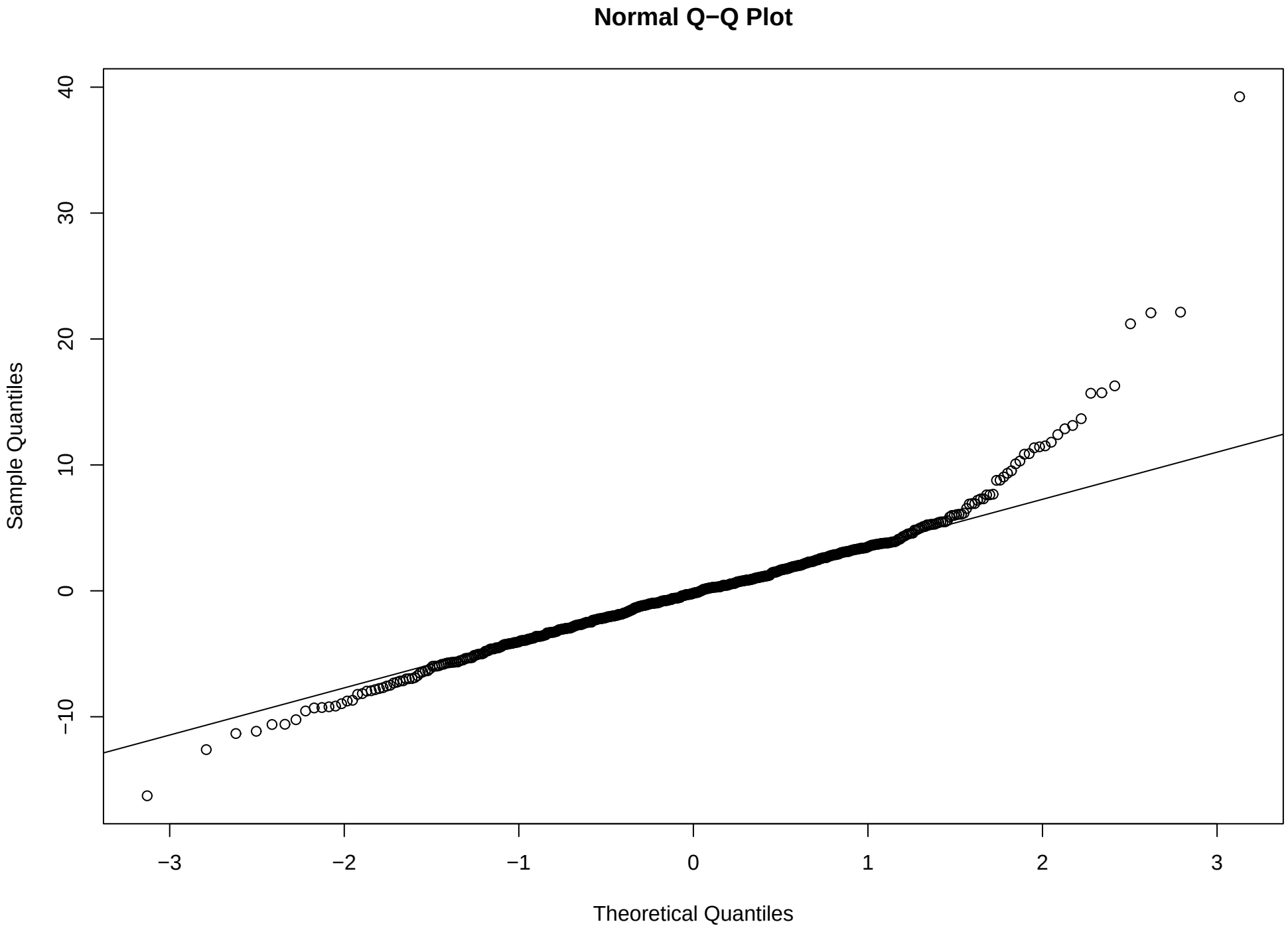

Histogram of lm5$residual
Frequency
0
50
100
150
200
−20
−10
0
10
20
30
40
Residuals


Residual
40
30
20
10
0
−10
30
40
50
60
70
80
Approval


Scaled Residuals
8
6
4
2
0
−2
0
100
200
300
400
500
Observation Number


Histogram of lm5.residual.scaled
Frequency
0
50
100
150
200
−4
−2
0
2
4
6
8
Scaled Residuals


Scaled Residual
−2
0
2
4
6
8
Approval
30
40
50
60
70
80


Normal Q−Q Plot
Sample Quantiles
Theoretical Quantiles
40
30
20
10
0
−10
−3
−2
−1
0
1
2
3