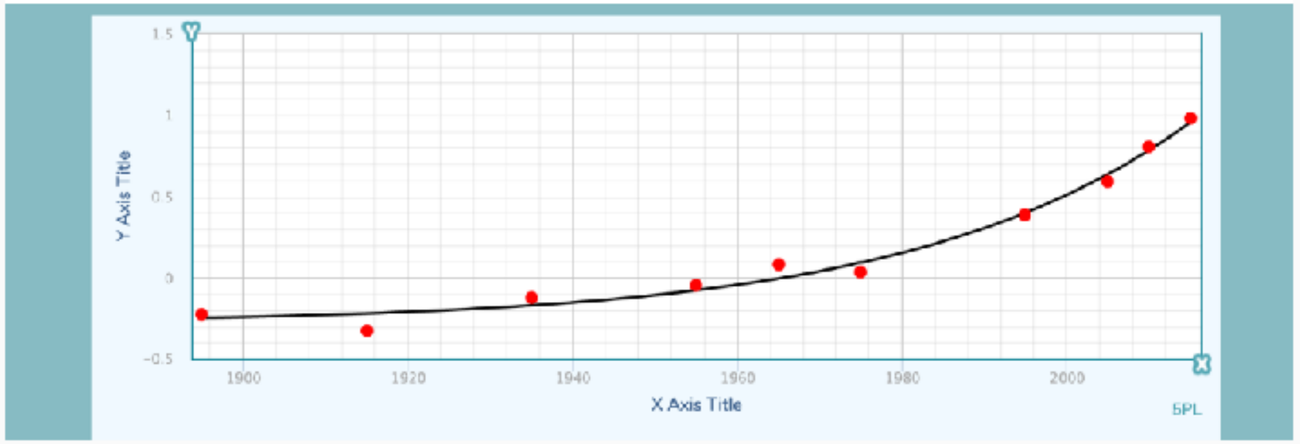
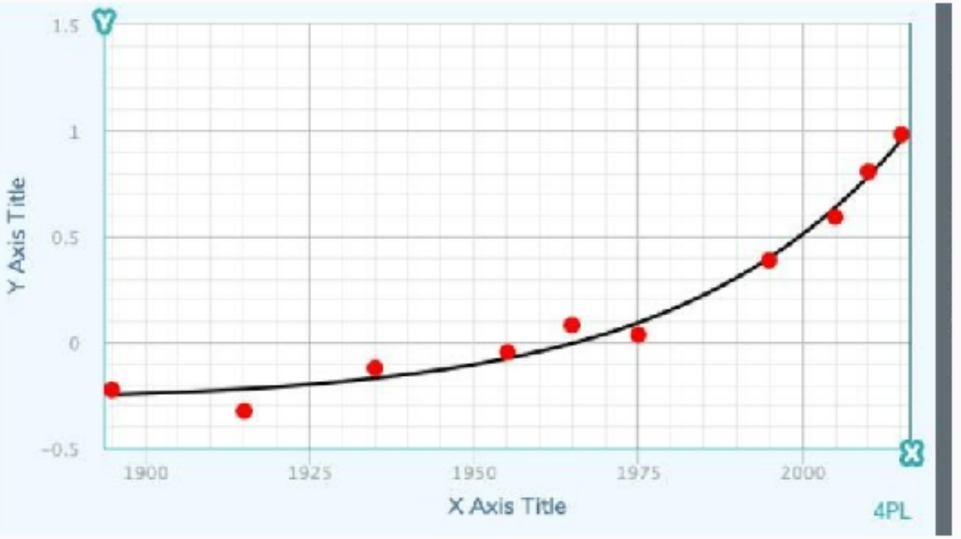
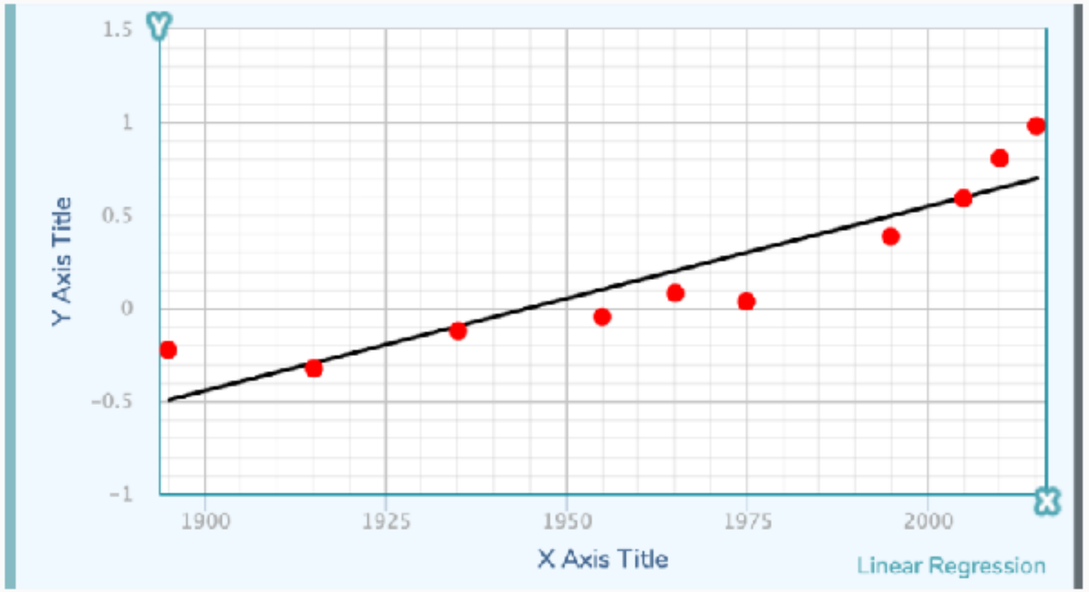
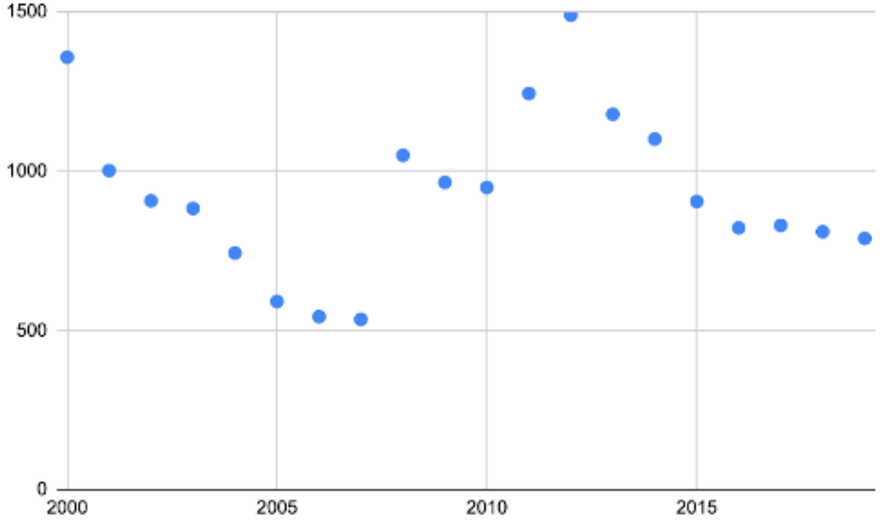

1.5
1
0.5
0
-0.5
Y Axis Title
1900
1920
1940
1960
1980
2000
X Axis Title
5PL

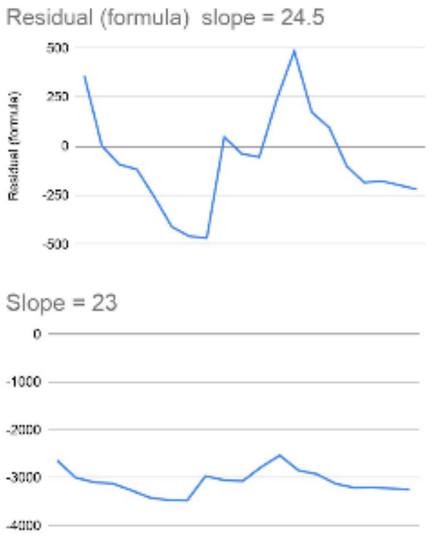

1.5
1
0.5
0
-0.5
Y Axis Title
1900
1925
1950
1975
2000
X Axis Title
4PL


1.5
1
0.5
0
-0.5
-1
Y Axis Title
1900
1925
1950
1975
2000
X Axis Title
Linear Regression



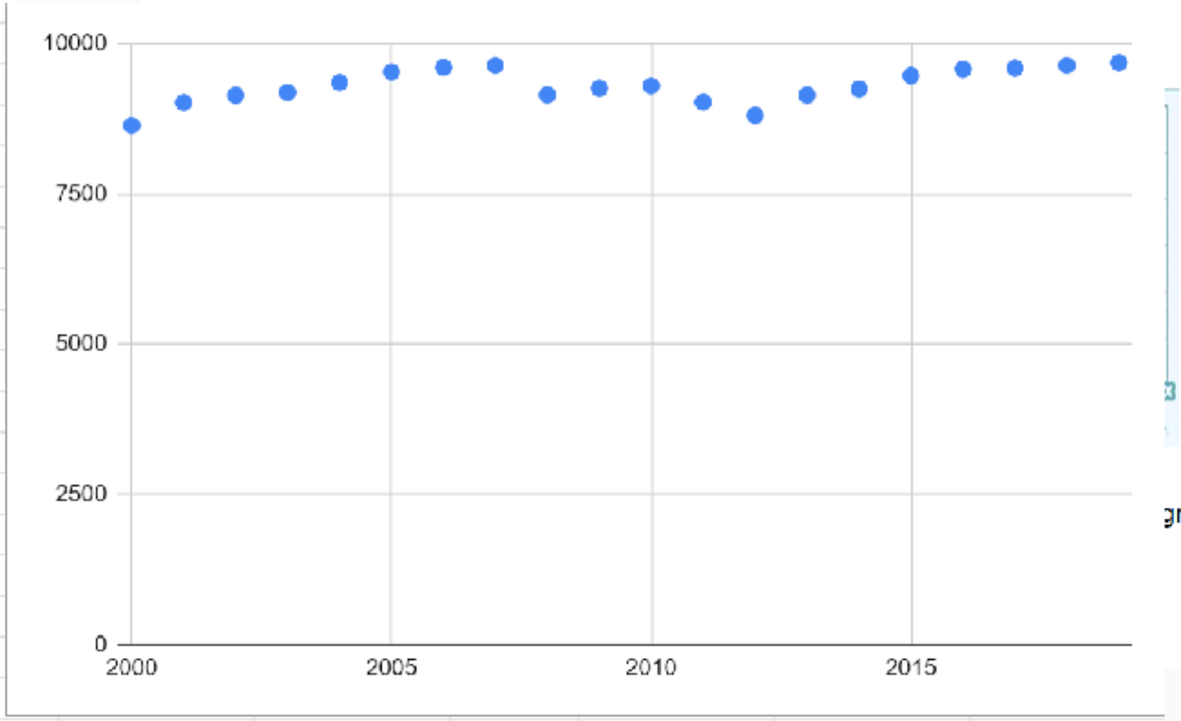
The residual values vary greatly over time and do not seem to be linearly correlated. The shape is more like a wave.

Step 2:

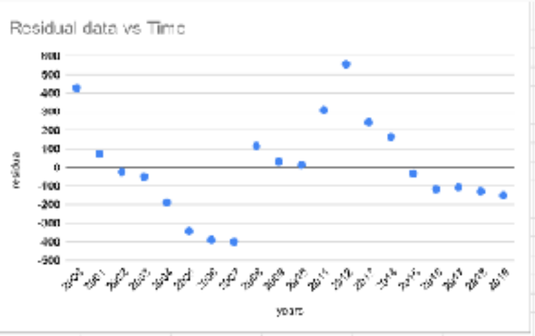


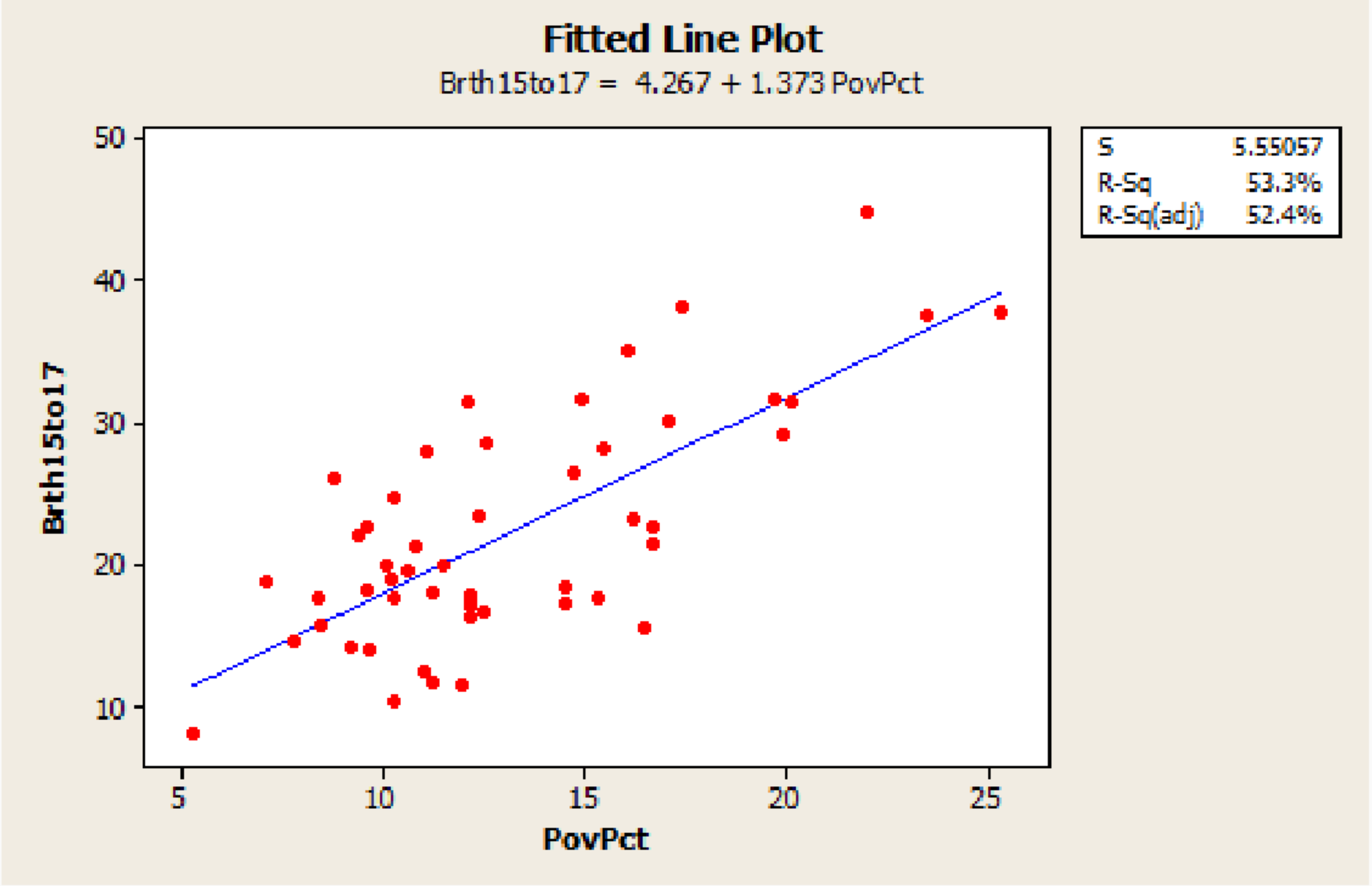
Step 3:

Increasing the slope made the residuals closer to 0, varying with positive and negative numbers rather than all negative.



gression fit being




Fitted Line Plot
Brth15to17 = 4.267 + 1.373 PovPct
S 5.55057
R-Sq 53.3%
R-Sq(adj) 52.4%
Brth15to17
PovPct
50
40
30
20
10
5
10
15
20
25