

Linear Regression Assignment

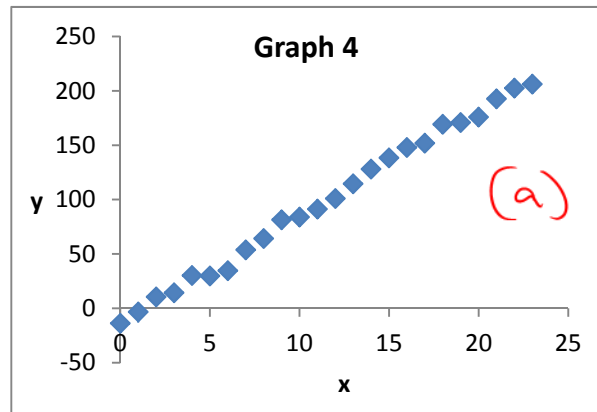
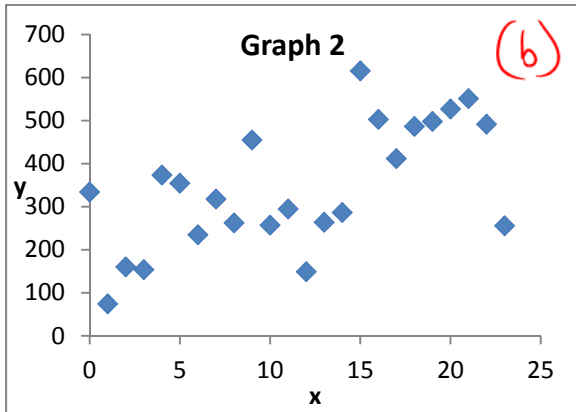
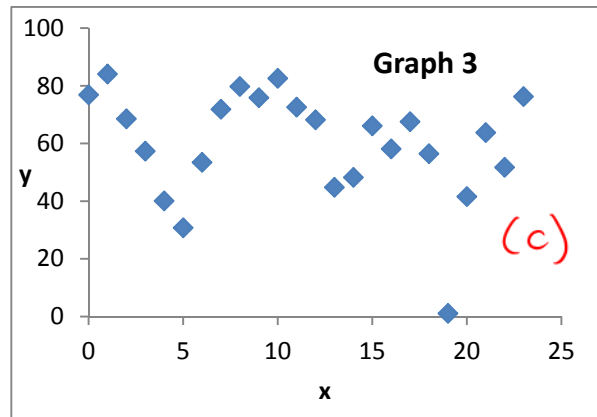
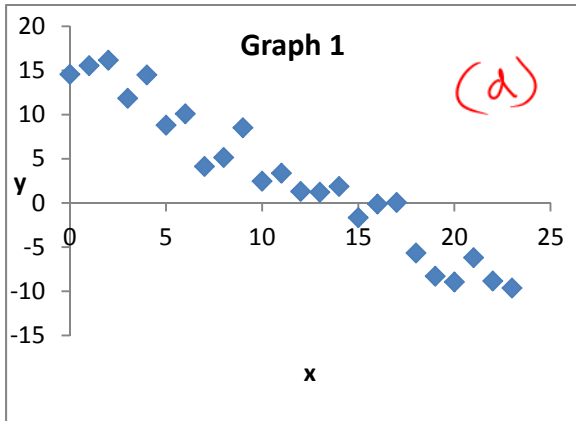
1. Match the following correlation coefficients to the correct graph:

a) 0.998 *Graph 4*

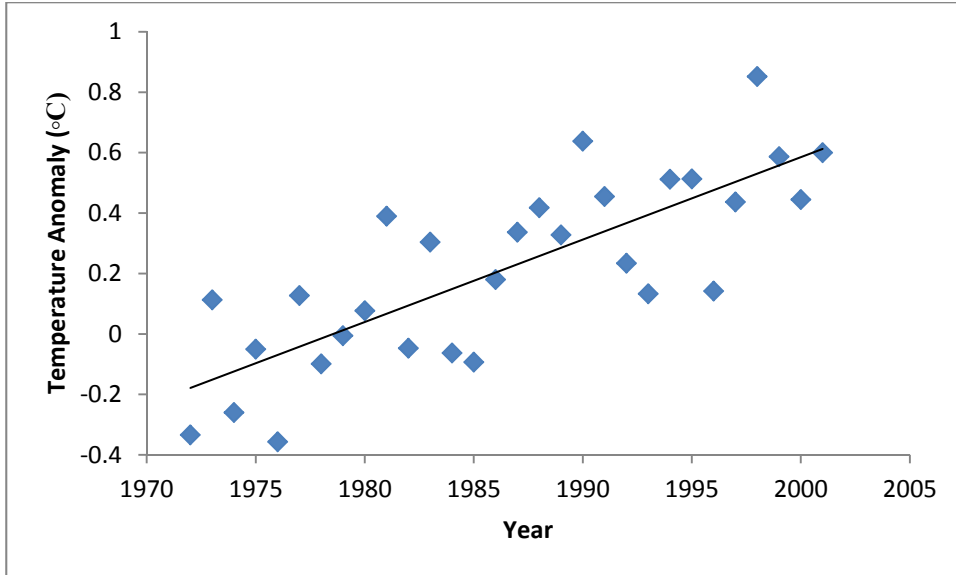
c) -0.26 *Graph 3*

b) 0.62 *Graph 2*

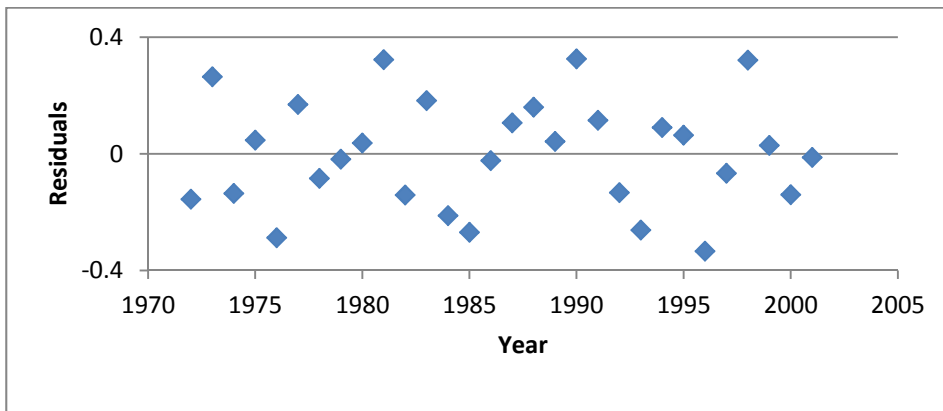
d) -0.97 *Graph 1*



2. The following graph shows the annual mean global surface temperature anomaly for the period 1972 to 2001 provided by the Global Historical Climate Network (data from exercise 12.11 in your text). The linear regression line is also included in the plot.



The residuals for the previous plot are shown below:



Does the assumption of a linear relationship appear to be reasonable? Explain.

Yes, because the residuals plot doesn't appear to have any residual curves or structure to it - the points appear to be quite random.