Solution 17.9

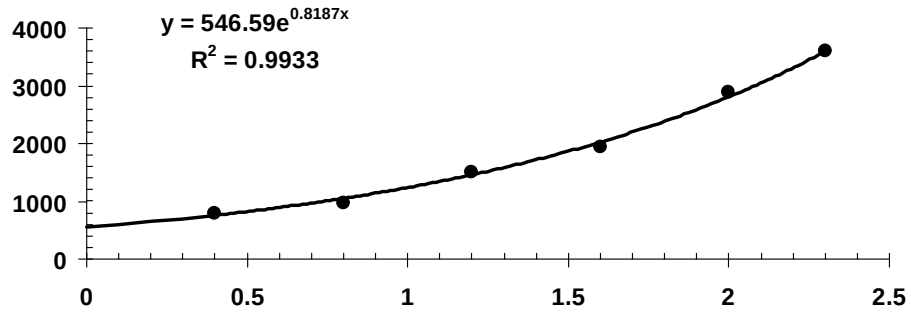
We regress ln(y) versus x to give

$$\ln y = 6.303701 + 0.818651x$$

Therefore, $\alpha_1 = e^{6.303701} = 546.5909$ and $\beta_1 = 0.818651$, and the exponential model is

$$y = 546.5909e^{0.818651x}$$

The model and the data can be plotted as



A semi-log plot can be developed by plotting the natural log versus x. As expected, both the data and the best-fit line are linear when plotted in this way.