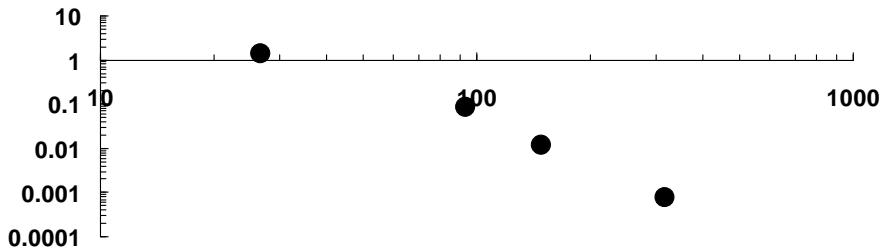


Solution 17.25

A log-log plot of μ versus T suggests a linear relationship.



We regress $\log_{10}\mu$ versus $\log_{10}T$ to give

$$\log_{10} \mu = 4.581471 - 3.01338 \log_{10} T \quad (r^2 = 0.975703)$$

Therefore, $\alpha_2 = 10^{4.581471} = 38,147.94$ and $\beta_2 = -3.01338$, and the power model is

$$\mu = 38,147.94 T^{-3.01338}$$

The model and the data can be plotted on untransformed scales as

