Gaussian Tail Function
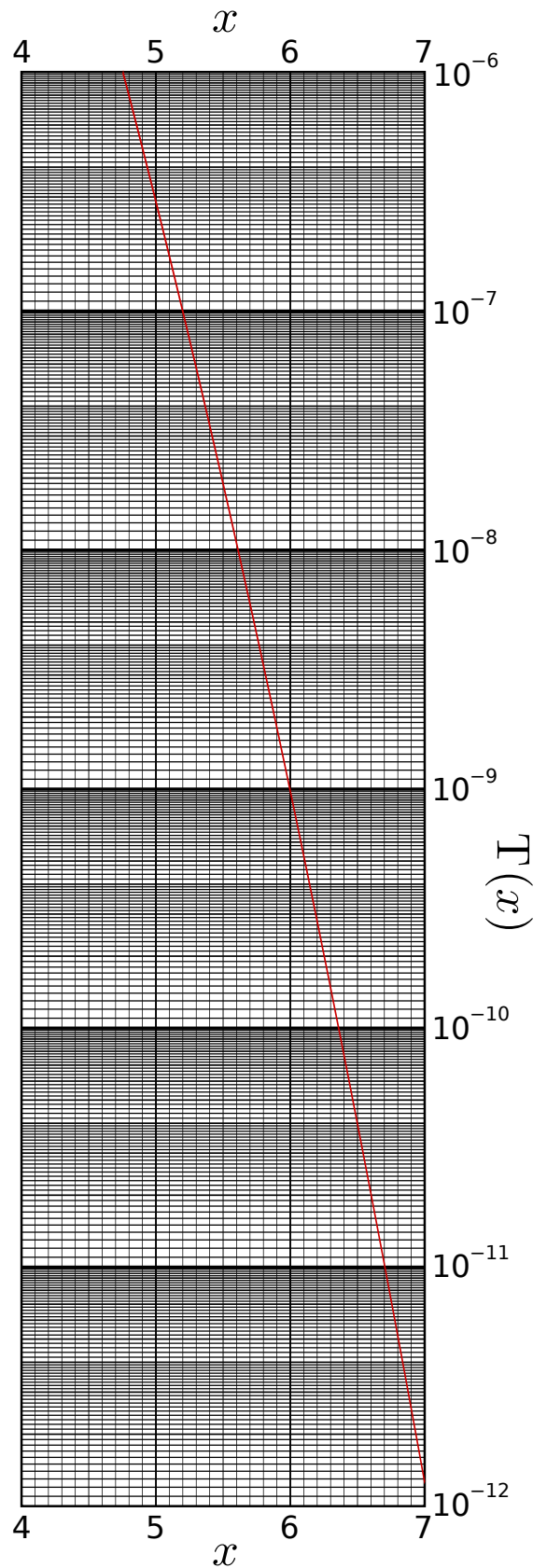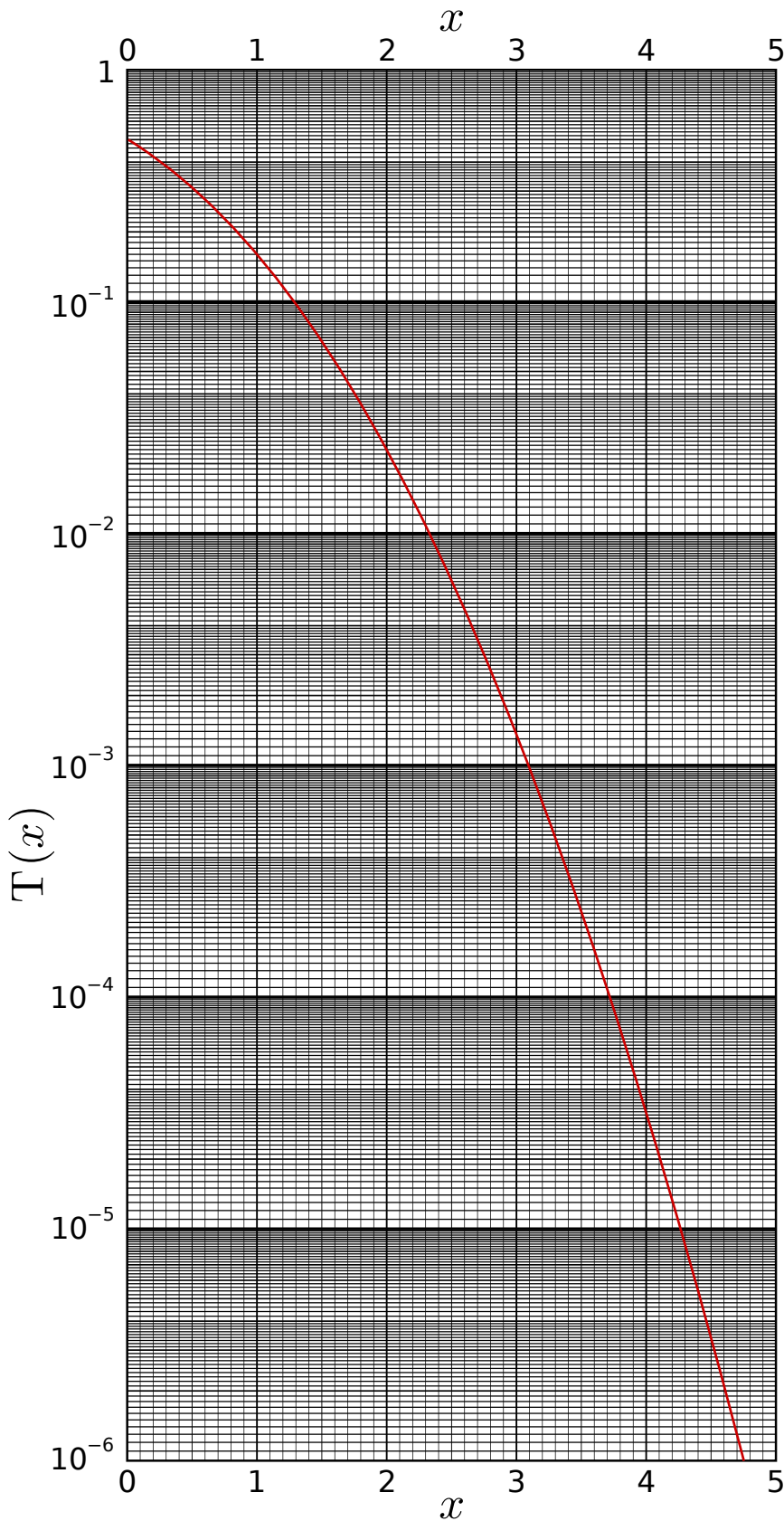
This graph shows the Gaussian Tail Function, T(x). This represents the area from x to ∞ under the Gaussian probability density function N(0,1).

$$T(x) = \int\limits_{x}^{\infty} \frac{1}{\sqrt{2\pi}} \exp\left(-\frac{y^2}{2}\right) dy$$

If x > 6.5, the following approximation may be made: $T(x) \approx \frac{1}{x\sqrt{2\pi}} \exp\left(-\frac{x^2}{2}\right)$