Gleichsetzung:

$$\frac{\log \frac{y_n}{y_0}}{\log a} = \frac{\log \left(1 - \frac{t_n}{t_{max}}\right)}{\log b}$$

$$\Leftrightarrow \log \frac{y_n}{y_0} = \frac{\log a}{\log b} \cdot \log \left(1 - \frac{t_n}{t_{max}}\right)$$

$$\Leftrightarrow \log \frac{y_n}{y_0} = \log \left(\left(1 - \frac{t_n}{t_{max}}\right)^{\frac{\log a}{\log b}}\right)$$

$$\Leftrightarrow \frac{y_n}{y_0} = \left(1 - \frac{t_n}{t_{max}}\right)^{\frac{\log a}{\log b}}$$

$$\Leftrightarrow y_n = y_0 \cdot \left(1 - \frac{t_n}{t_{max}}\right)^{\frac{\log a}{\log b}}$$

$$y_n = y_0 \cdot \left(1 - \frac{t_n}{t_{max}}\right)^{1}$$