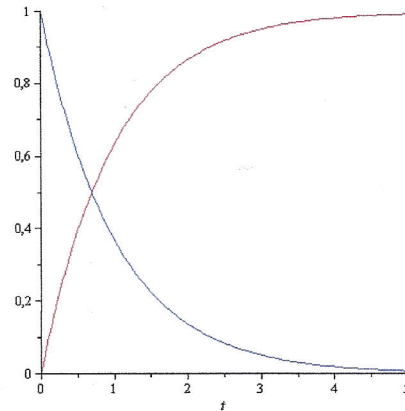


Ladung:

$$u_c = U \cdot \left(1 - e^{-\frac{t}{\tau}}\right)$$

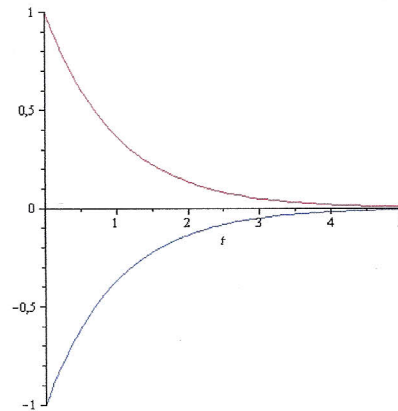
$$i_c = \frac{U}{R} \cdot e^{-\frac{t}{\tau}}$$



Entladung:

$$u_c = U \cdot e^{-\frac{t}{\tau}}$$

$$i_c = -\frac{U}{R} \cdot e^{-\frac{t}{\tau}}$$



5.

Def.:

$$\tau = R \cdot C$$

$$t_H \approx 0,69 \tau = 0,69 RC$$

$t = 5\tau \rightarrow$ entspricht der technischen Lade- bzw. Entladezeit.