$$\frac{\delta V(t)}{\delta t} = -\frac{1}{\tau}\left[V(t) - V_\infty\right] \qquad V(0) = V_0$$

$$V(t) = V_\infty + (V_0 - V_\infty)\exp\left(-\frac{t}{\tau}\right)$$

final value x_∞

initial value x_0

time constant τ_x

Save Figure