

rechnung_signalzeitverlauf_umkehrintegrator

Student Group

First Name	Surname	Matrikel Nr.

Table of Contents

\$I.\quad\$ Am Punkt \$t_1\$

$U_{A}(t_1) = -\frac{1}{\tau} \int_{t_0}^{t_1} U_E \, dt + U_{A}(t_0)$	Werte einsetzen
$U_{A}(t_1) = -\frac{1}{5 \text{ ms}} \int_{0}^{10 \text{ ms}} 1 \text{ V} \, dt + 0 \text{ V}$	
$U_{A}(t_1) = -\frac{1}{5 \text{ ms}} \int_{0}^{10 \text{ ms}} 1 \text{ V} \, dt$	
$U_{A}(t_1) = -\frac{1}{5 \text{ ms}} \int_{0}^{10 \text{ ms}} 1 \text{ V} \, dt$	
$U_{A}(t_1) = -\frac{1}{5 \text{ ms}} \int_{0}^{10 \text{ ms}} 1 \text{ V} \, dt$	
$U_{A}(t_1) = -\frac{1}{5 \text{ ms}} \int_{0}^{10 \text{ ms}} 1 \text{ V} \, dt$	
$U_{A}(t_1) = -\frac{1}{5 \text{ ms}} \int_{0}^{10 \text{ ms}} 1 \text{ V} \, dt$	
$U_{A}(t_1) = -\frac{1}{5 \text{ ms}} \int_{0}^{10 \text{ ms}} 1 \text{ V} \, dt$	

\$I.\quad\$ Am Punkt \$t_2\$

$U_{A}(t_1) = -\frac{1}{\tau} \int_{t_0}^{t_1} U_E \, dt + U_{A}(t_0)$	Werte einsetzen
$U_{A}(t_1) = -\frac{1}{5 \text{ ms}} \int_{10 \text{ ms}}^{20 \text{ ms}} (-1 \text{ V}) \, dt + 2 \text{ V} = 0 \text{ V}$	

\$I.\quad\$ Am Punkt \$t_3\$

$U_{A}(t_1) = -\frac{1}{\tau} \int_{t_0}^{t_1} U_E \, dt + U_{A}(t_0)$	Werte einsetzen
$U_{A}(t_1) = -\frac{1}{5 \text{ ms}} \int_{10 \text{ ms}}^{20 \text{ ms}} (-2 \text{ V}) \, dt + 0 \text{ V} = -2 \text{ V}$	

From:
<https://wiki.mexle.org/> - MEXLE Wiki

Permanent link:
https://wiki.mexle.org/elektronische_schaltungstechnik/rechnung_signalzeitverlauf_umkehrintegrator?rev=1590079428

Last update: 2021/05/09 09:53

