

rechnung_umkehrintegrator

Student Group

First Name	Surname	Matrikel Nr.

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$U_A = f(U_E)$	mit III.	
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$U_A = \textcolor{blue}{-U_D} - U_C$	mit II. und I.	$\$ \textcolor{blue}{U_D} = \{ 1 \over A_D \} \cdot U_A \overset{A_D \rightarrow \infty}{\longrightarrow} 0$
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$U_A = \text{quad} \text{quad} 0 \text{quad} - \textcolor{blue}{U_C}$	mit V.	$\$ \textcolor{blue}{U_C} = \{ 1 \over C \} \cdot \int_0^{t_1} I_C \, dt + Q_0(t_0)$
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$U_A = - \{ 1 \over C \} \cdot \int_0^{t_1} I_C \, dt + Q_0(t_0)$	mit IV.	$\$ \textcolor{blue}{I_C} = I_R$
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$U_A = - \{ 1 \over C \} \cdot \int_0^{t_1} I_R \, dt - \textcolor{blue}{Q_0(t_0) \over C}$	Integrationskonstante betrachten	$\$ \textcolor{blue}{Q_0(t_0) \over C} = U_C(t_0) = -U_{A0}$
$\$ \backslash \text{quad} \backslash \text{quad} \backslash \text{quad} \backslash \text{quad} \backslash \text{quad} \backslash \text{quad} \$$	$\$ \backslash \text{quad} \backslash \text{quad} \backslash \text{quad} \backslash \text{quad} \backslash \text{quad} \backslash \text{quad} \$$	$\$ \backslash \text{quad} \backslash \text{quad} \backslash \text{quad} \backslash \text{quad} \backslash \text{quad} \backslash \text{quad} \$$
$U_A = - \{ 1 \over C \} \cdot \int_0^{t_1} I_R \, dt + U_{A0}$	mit VI. und II.	$\$ \textcolor{blue}{I_R} = \{ U_R \over R \} = \{ U_E \over R \}$
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$U_A = - \{ 1 \over C \} \cdot \int_0^{t_1} I_R \, dt + U_{A0}$	Konstante vorziehen	
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