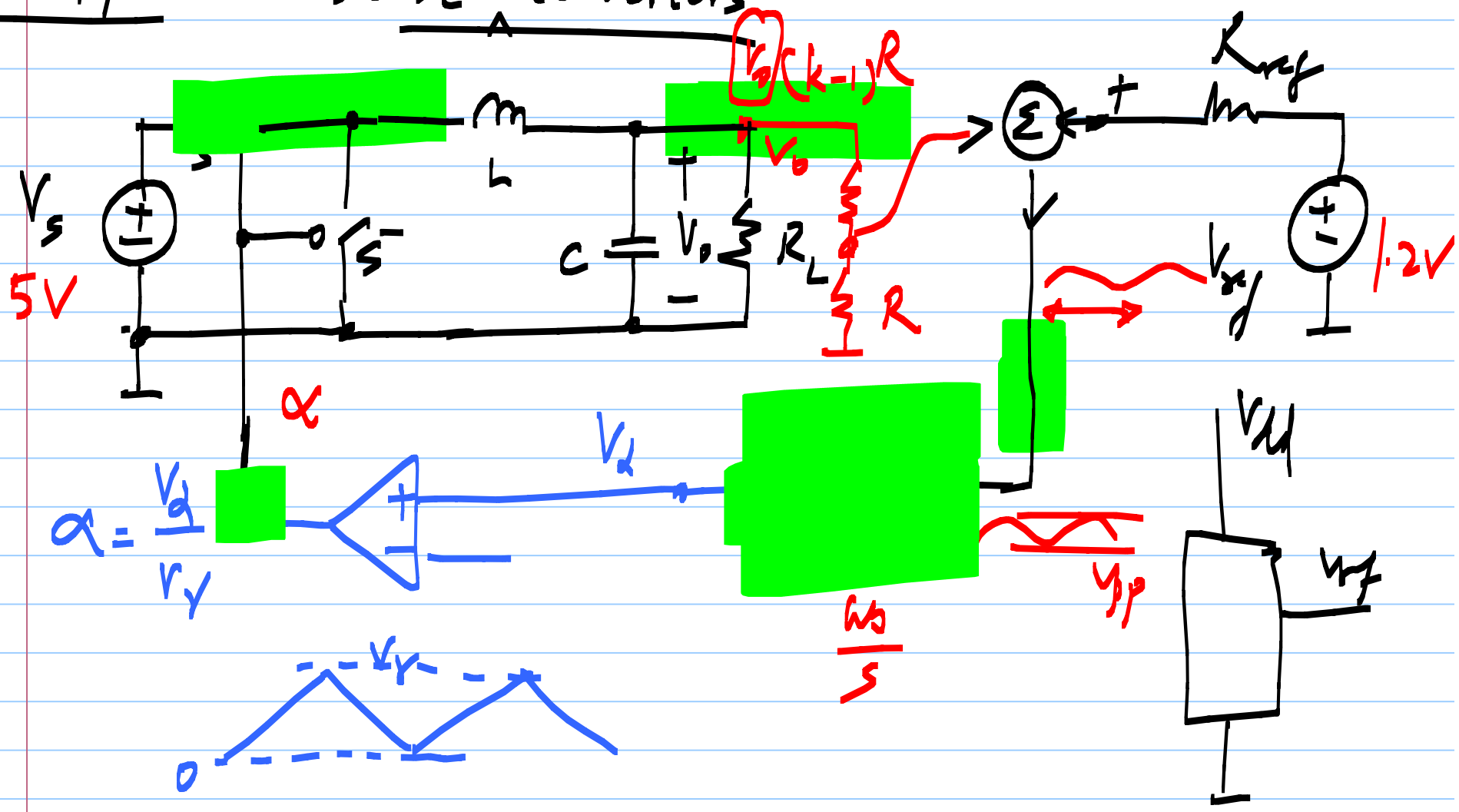
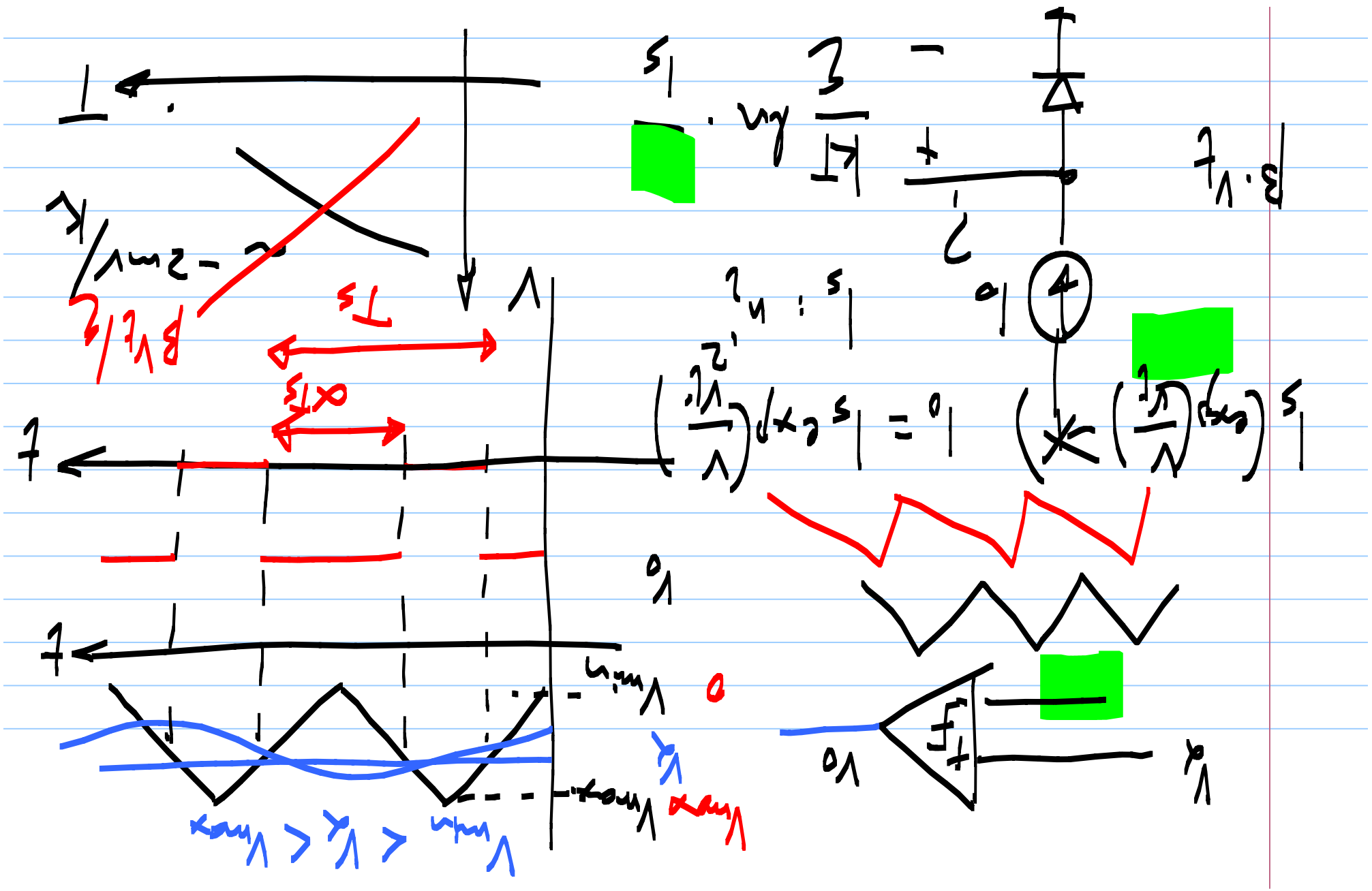
EE209

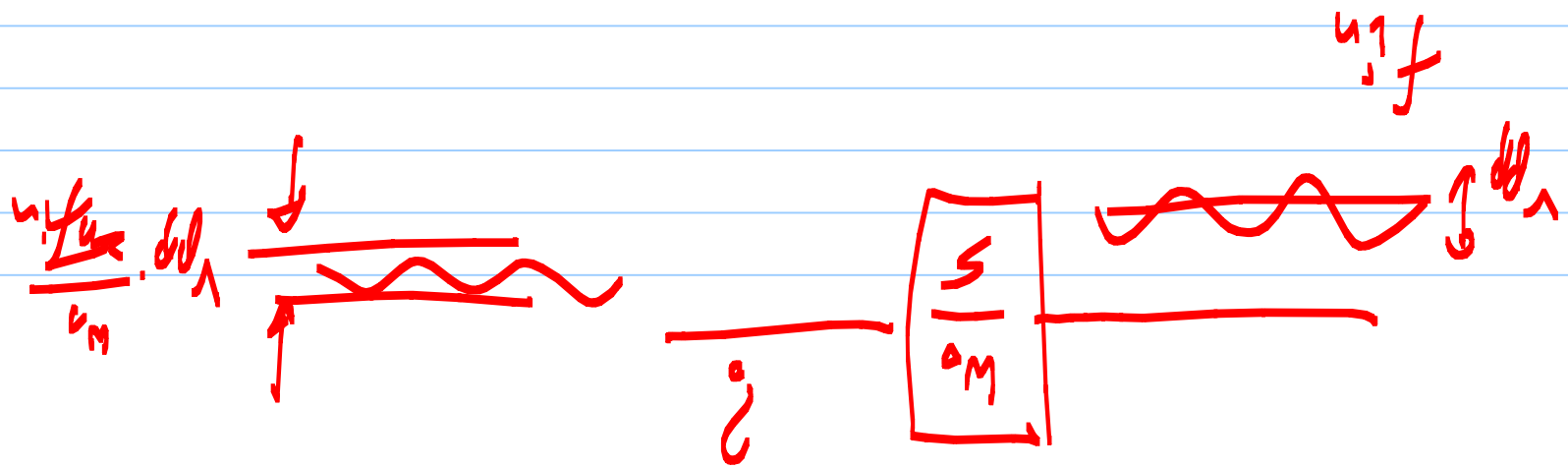
buck DC-DC converters

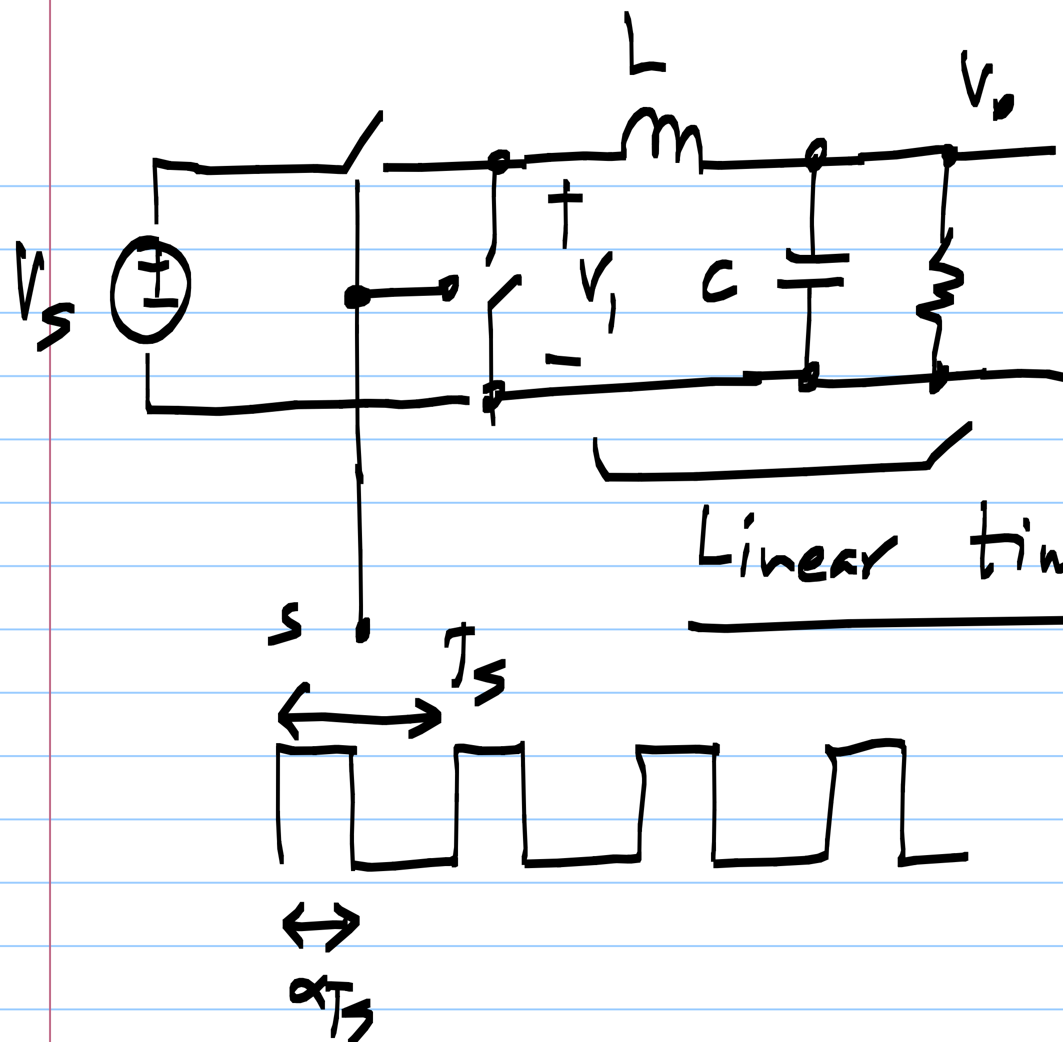
$K \cdot V_{ref}$

Desired value: V_{ref}









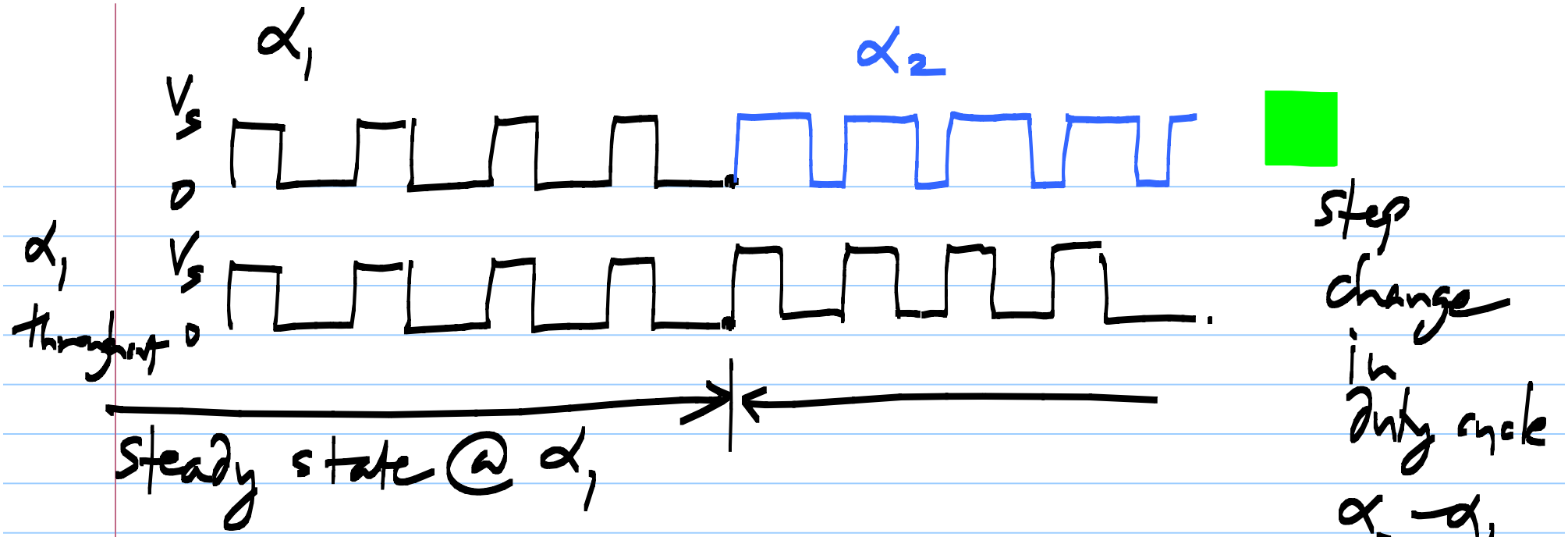
Linear time-invariant

$v_1 \rightarrow v_o$

$$\frac{V_o(s)}{V_1(s)} =$$

$\mathcal{L}$

$$v_o(t) = v_1(t) * h(t)$$


α_1
α_2
V_s
0
V_s
α_1
throughout
0
steady state @ α_1
step change in duty cycle $\alpha_2 - \alpha_1$