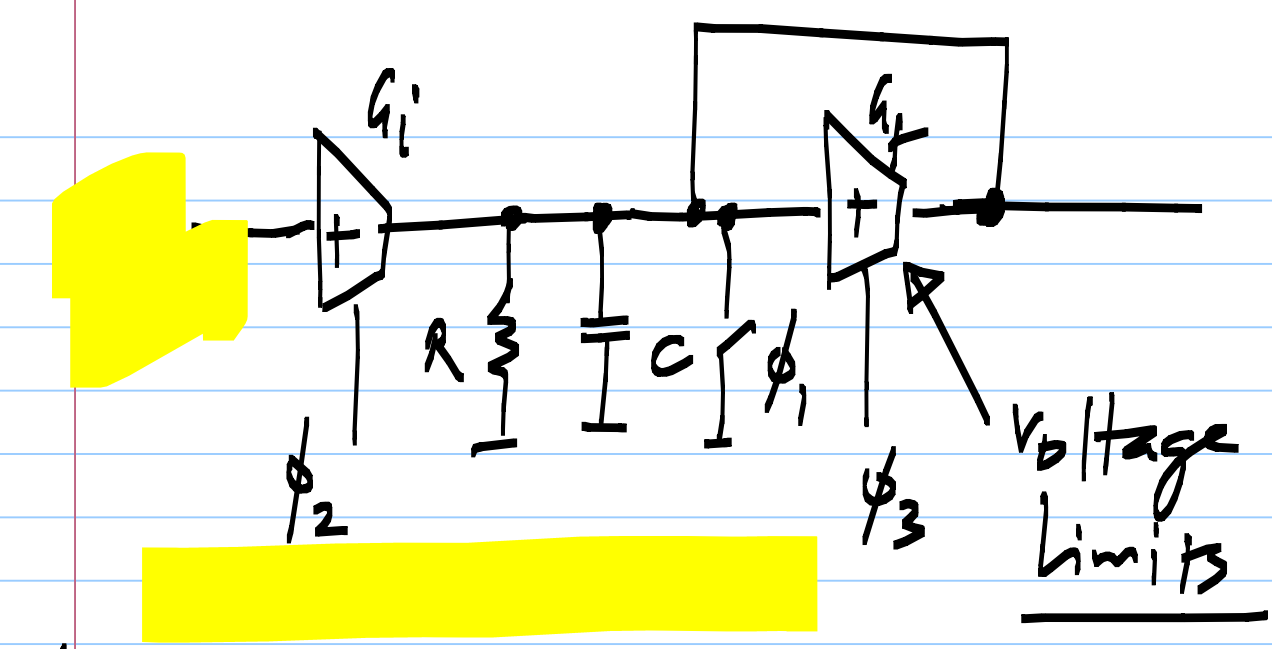
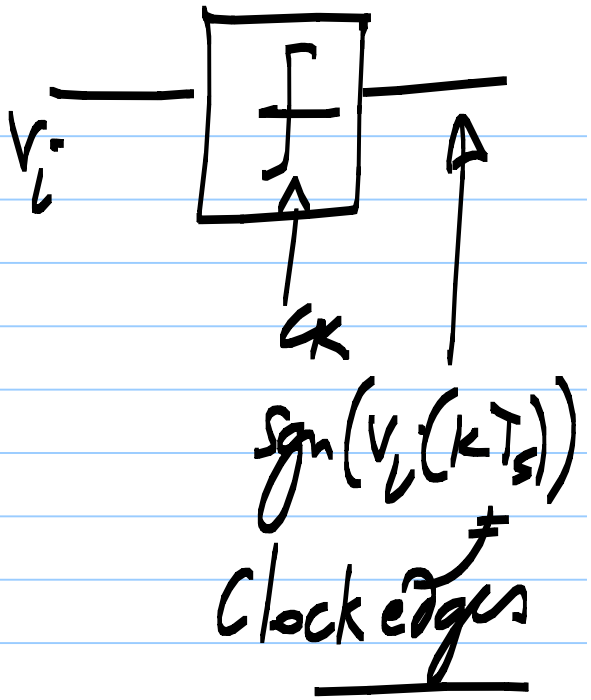
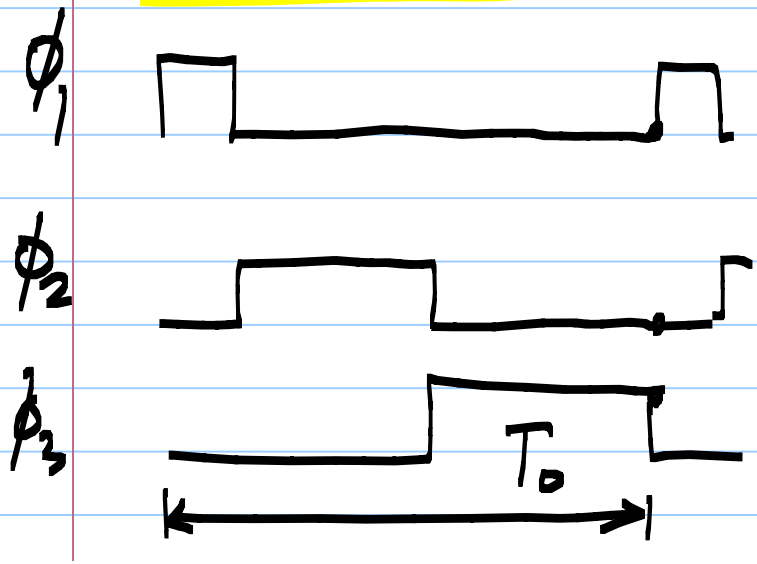

G_1
G_2
R
C
ϕ_1
ϕ_2
ϕ_3
Voltage
limits


V_i
ck
$sgn(V_i(kT_s))$
Clock edges


ϕ_1
ϕ_2
ϕ_3
T_0

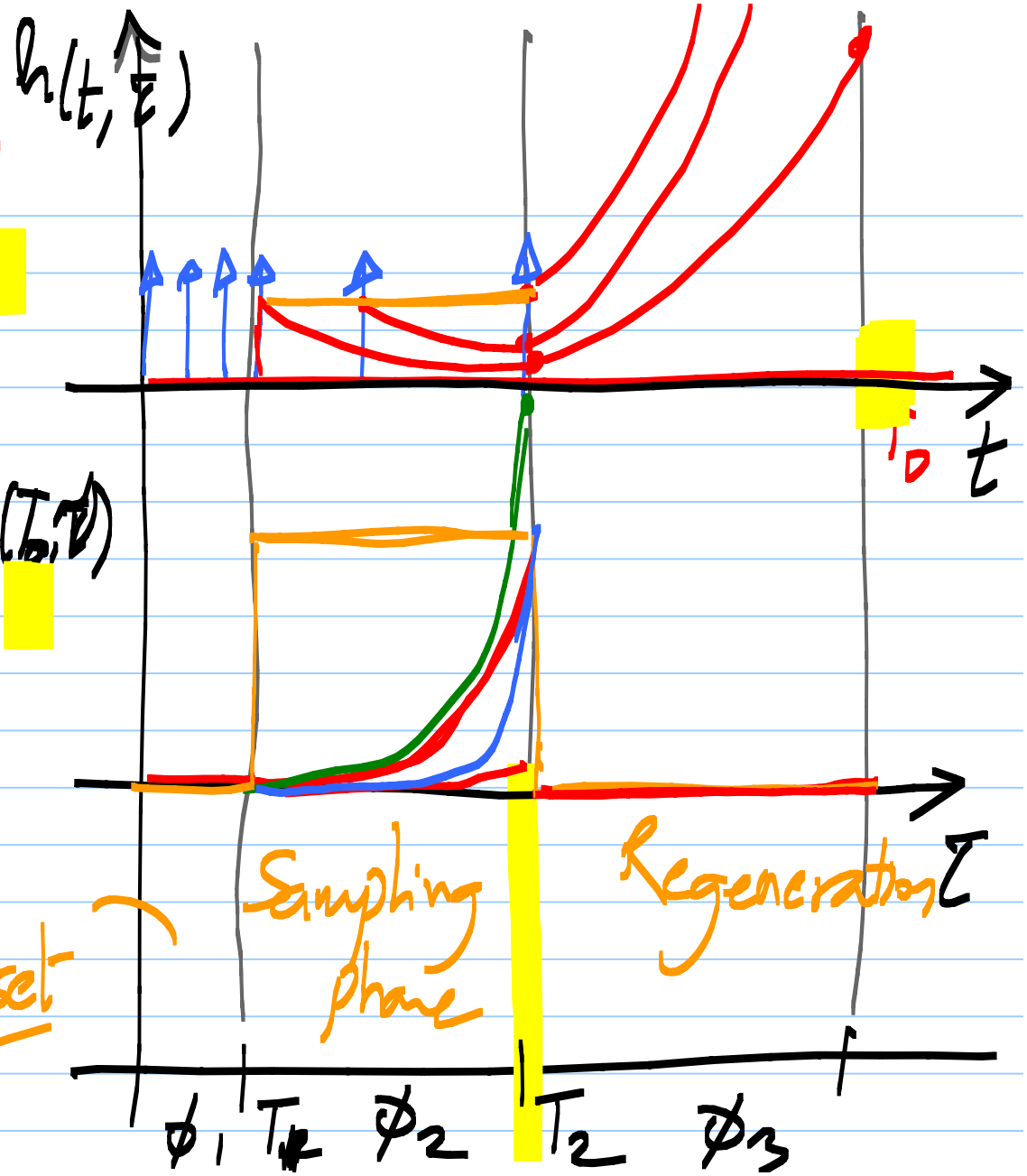
$h(t,\tau) \rightarrow h(T_0,\tau)$

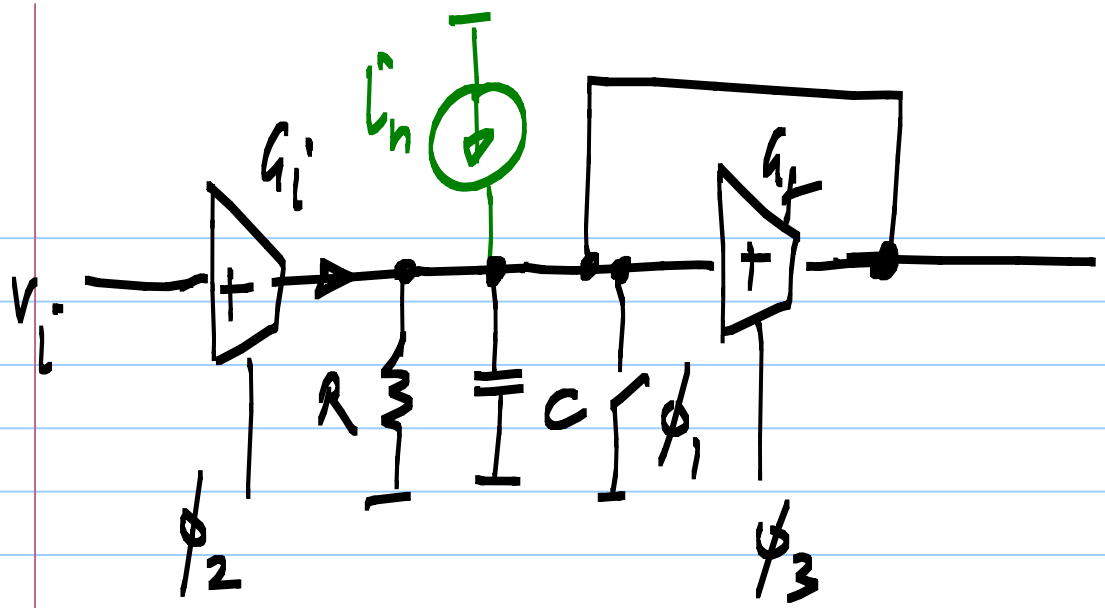
impulse launch instant

$V_i = \psi_0 \delta(t-\tau)$

$V_0 s$

$\frac{y(t)}{\psi_0} \rightarrow h(t,\tau)$



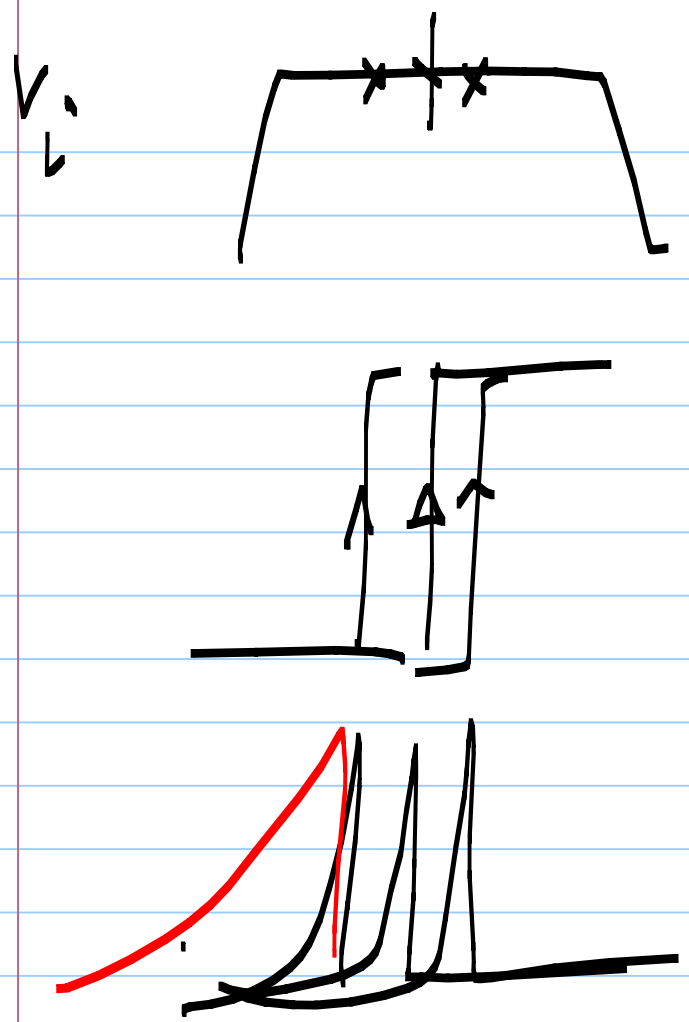


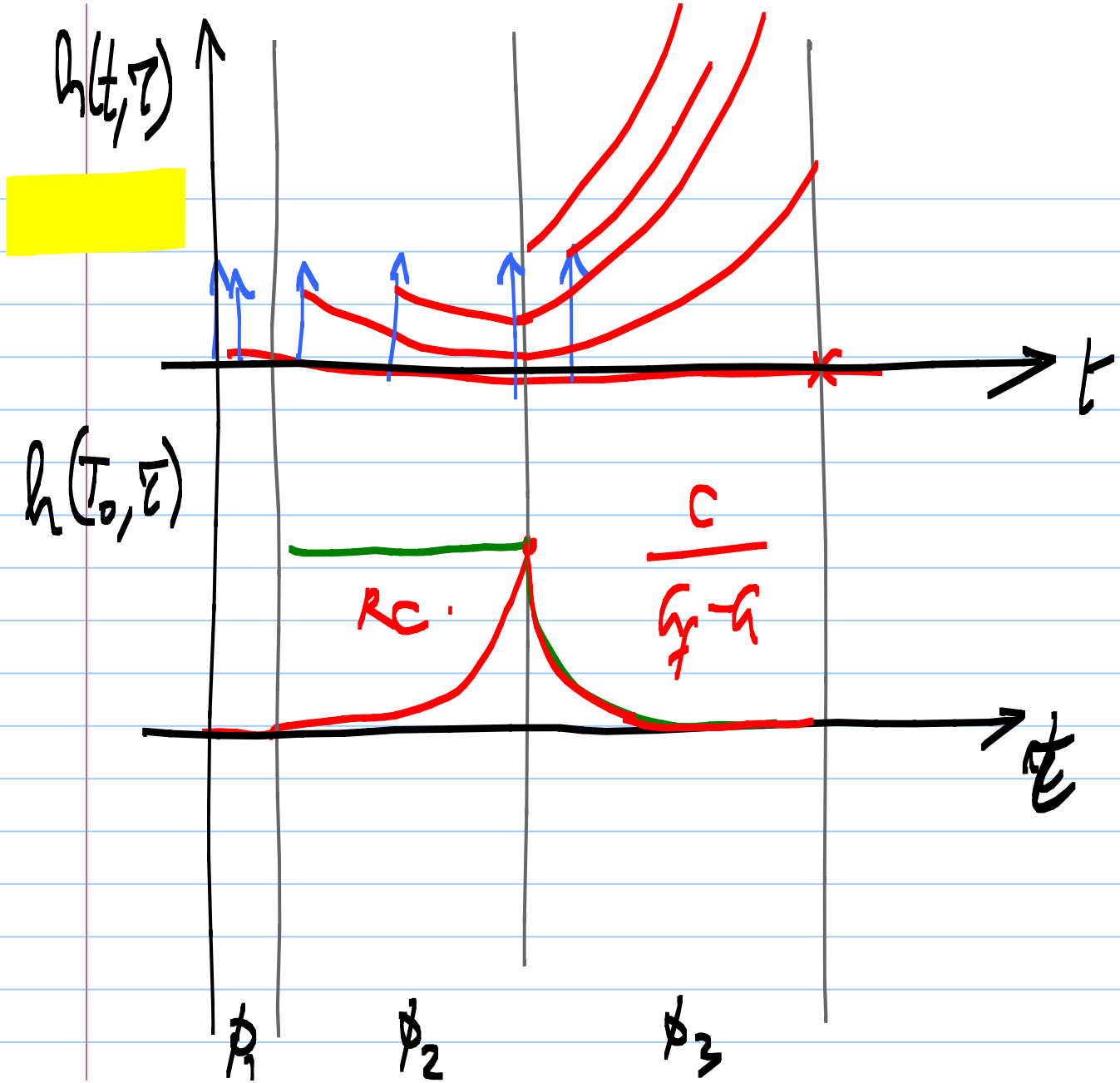
$$v_i = \psi_0 \cdot \delta(t-\tau) \qquad \tau \in \phi_2$$

$$\frac{G_m \psi_0}{C} \cdot \exp\left(-\frac{(t-\tau)}{R_C}\right); \quad t \in \phi_2$$

$$t \in \phi_3$$

$$\frac{G_m \psi_0}{C} \exp\left(-\frac{(T_2-\tau)}{R_C}\right) \cdot \exp\left(\frac{G_f - G}{C} \cdot (t-T_2)\right)$$



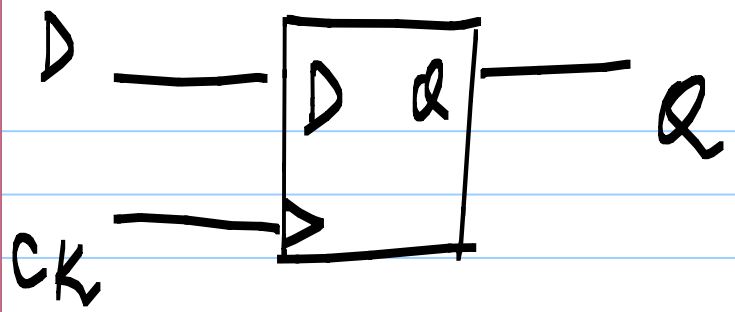


i_h as input

$$i_h = Q_0 \delta(t-\tau)$$

$$\phi_2 : \frac{1}{C} \exp\left(-\frac{t-\tau}{RC}\right)$$

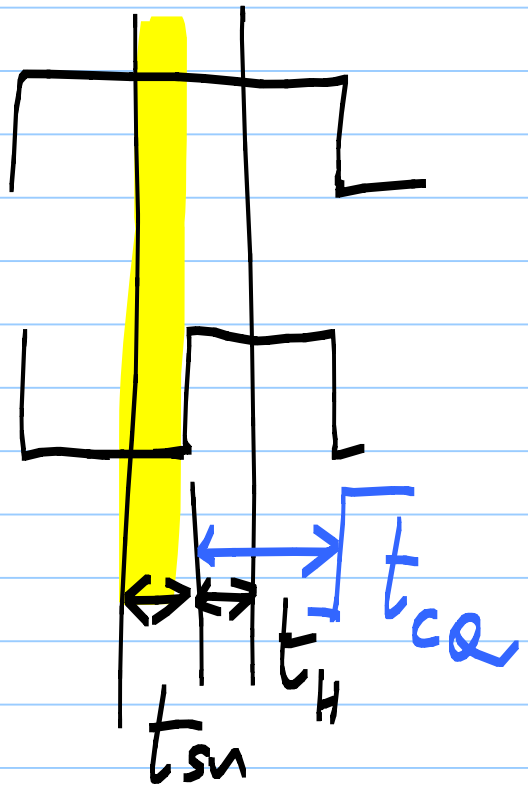
$$\phi_3 : \frac{1}{C} \exp\left(-\frac{T_2-\tau}{RC}\right) \exp\left(\frac{G_f-G}{C}(t-T_2)\right)$$



t_{su} : setup time

t_H : hold time

t_{cQ} : clock-to-Q delay



$h(T_0, \tau)$: