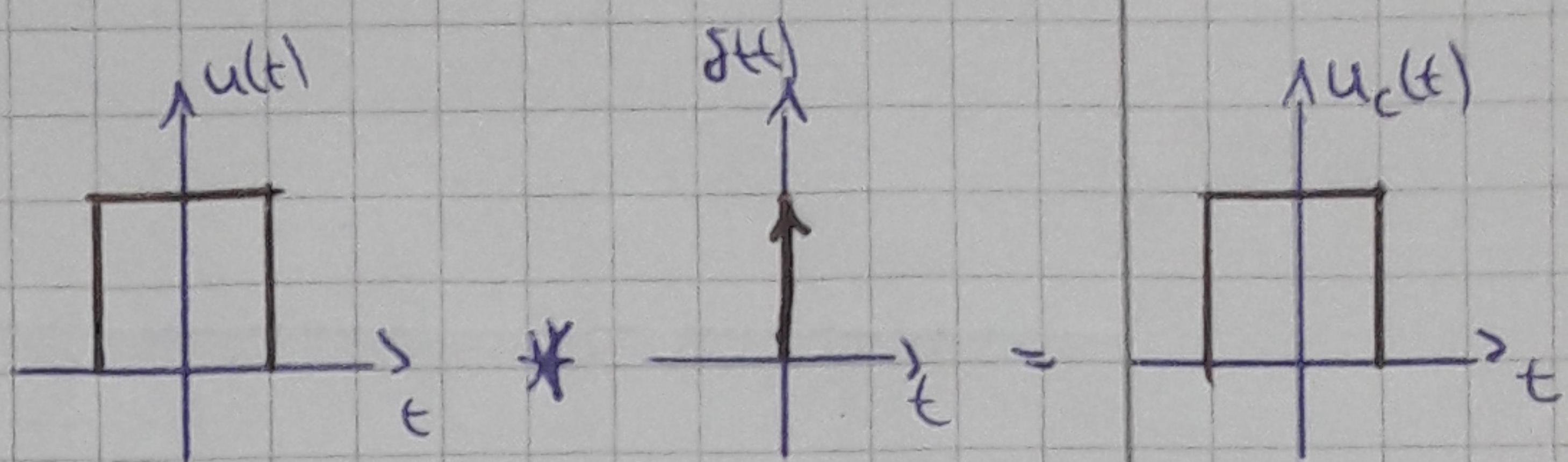


Result of the convolution

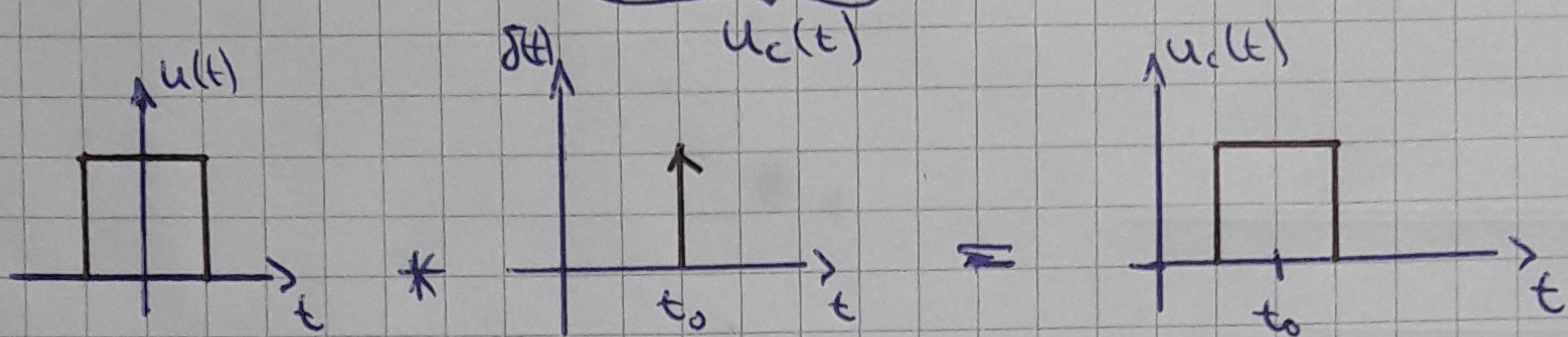
- with of one single

$$k \cdot u(t) * \delta(t) = \underbrace{k \cdot u(t)}_{u_c(t)}$$



- with time difference

$$k \cdot u(t) * \delta(t - t_0) = \underbrace{k \cdot u(t - t_0)}_{u_c(t)}$$



- of a periodically dirac sequence

$$\sum_{k=-\infty}^{\infty} \delta(t - k \cdot t_0) * u(t) = \sum_{k=-\infty}^{\infty} u(t - k \cdot t_0)$$

