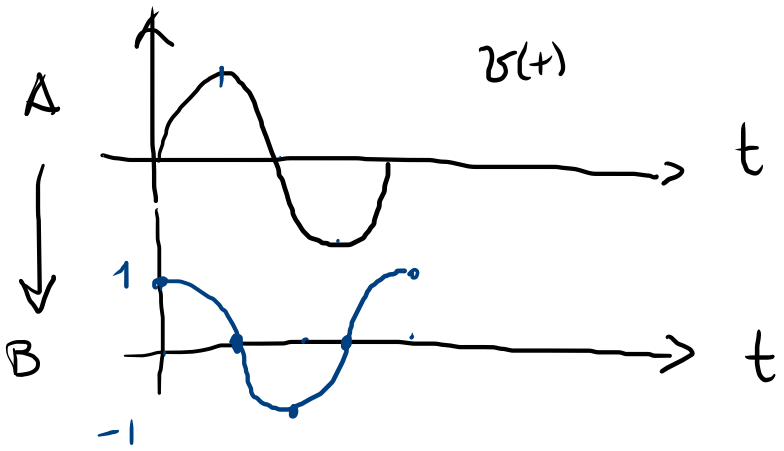
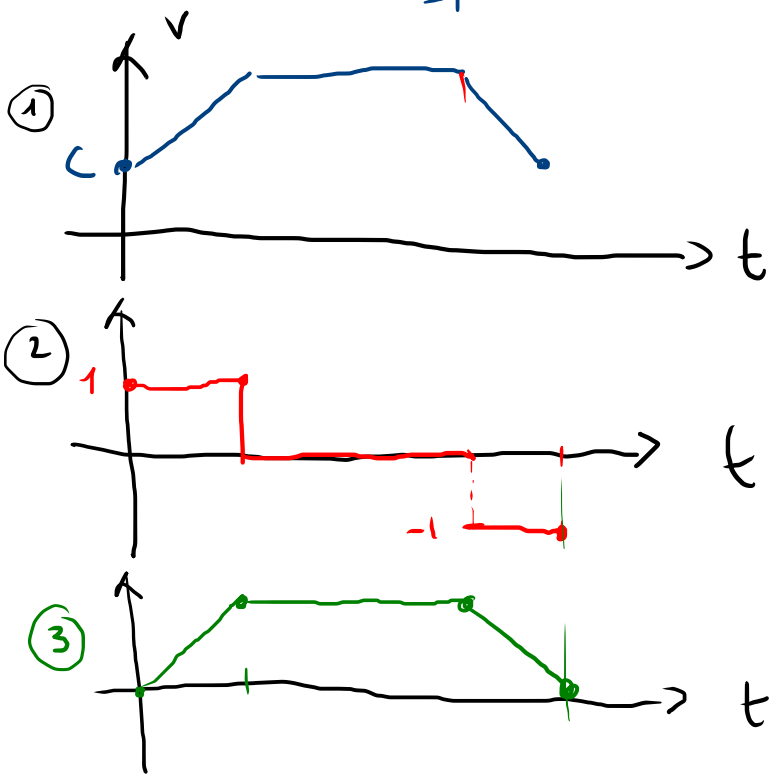
$\int - \frac{d}{dt}$

$v(t) \rightsquigarrow \frac{d}{dt} v(t)$





$\downarrow \frac{d}{dt}$

$\downarrow \int$

$v(t)$

$\downarrow$

$v'(t) = \frac{dv}{dt}$

$\downarrow$

$v(t) = \int v'(t)\, dt$