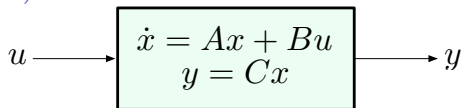


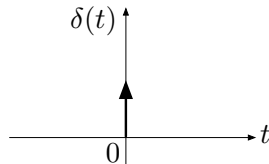
Impulse Response

(Review from ECE 210)

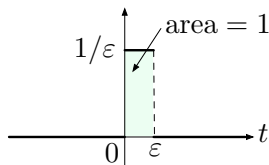


Unit impulse (or Dirac's δ -function):

1. $\delta(t) = 0$ for all $t \neq 0$
2. $\int_{-a}^a \delta(t) dt = 1$ for all $a > 0$



It is useful to think of $\delta(t)$ as a limit of impulses of unit area:



as $\epsilon \rightarrow 0$, the impulse gets taller ($1/\epsilon \rightarrow +\infty$), but the area under its graph remains at 1