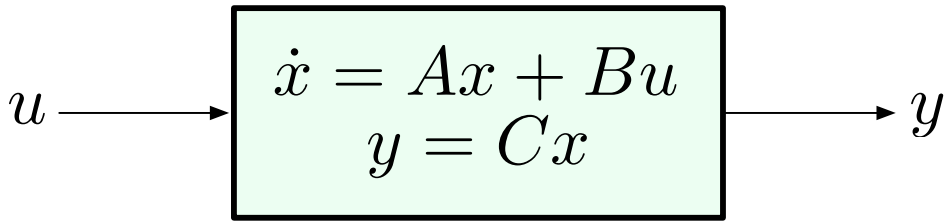
Impulse Response



zero initial condition: $x(0) = 0$

$$u(t) = \delta(t - \tau) \xrightarrow{x(0)=0;\ \text{LTI system}} y(t) = h(t - \tau)$$

Questions to consider:

1. If we know h, how can we find the system's response to other (arbitrary) inputs?
2. If we don't know h, how can we determine it?

We will start with Question 1.