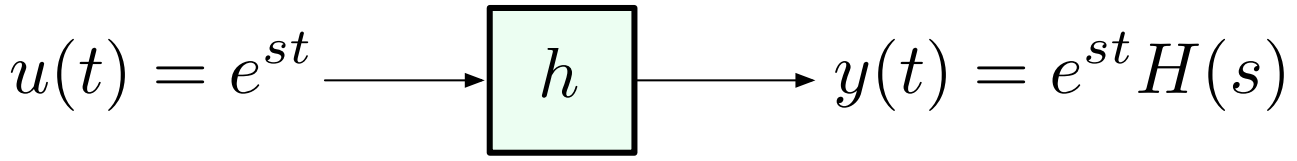
Determining the Impulse Response



compute $H(s) = \dfrac{y(t)}{u(t)}$, repeat for as many values of s as necessary

Q: Is this likely to work *in practice*?

A: No — e^{st} blows up very quickly if $s > 0$, and decays to 0 very quickly if $s < 0$.

So we need *sustained, bounded signals* as inputs.

This is possible if we allow s to take on *complex values*.