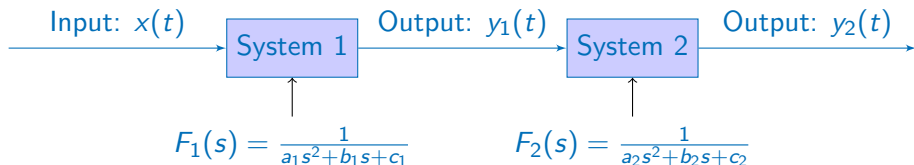


Application: Linear Time Invariant Systems



$$y_1(t) = x(t) * f_1(t)$$

$$y_2(t) = y_1(t) * f_2(t)$$

$$= x(t) * f_1(t) * f_2(t)$$

$$= x(t) * (f_1(t) * f_2(t))$$

$$f_1(t) * f_2(t) = \text{Impulse response for total system}$$