

zero cancellation

$$\frac{y(s)}{x(s)} = \frac{(s+1)(s+2)}{(s+3)(s+4)(s+12)} = \frac{s^2 + 3s + 2}{s^3 + 8s^2 + 19s + 12}$$

$$\text{num} = [1 \ 3 \ 2]; \text{den} = [1 \ 8 \ 19 \ 12]; \text{sys} = \text{tf}(\text{num}, \text{den});$$

$$\frac{s^2 + 3s + 2}{s^3 + 8s^2 + 19s + 12}$$

$$\text{sys} - \text{min} = \text{minreal}(\text{sys})$$

$$\frac{s+2}{s^2 + 7s + 12}$$