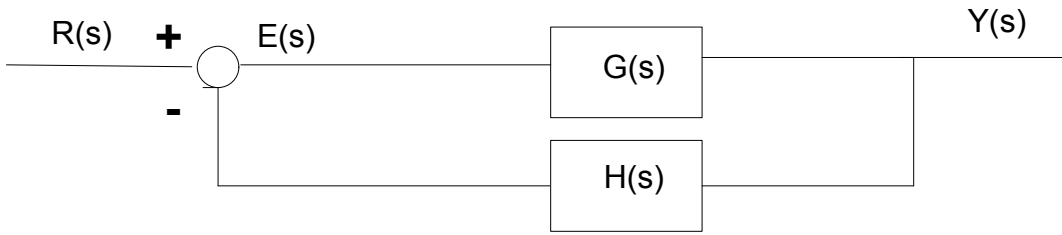


# Aplicação das Condições Angular e de Módulo

Diagrama de Pólos e Zeros para  $G(s)*H(s)$



Manter fatorado os polinômios originais de  $G(s)$  e  $H(s)$

$$G(s)*H(s) = \frac{K* (s+1/T1)^2}{S*(s+1/T2) * (s^2 + 2*\xi*\omega_n*s + \omega_n^2)} \cdot \frac{K* (s - z1)^2}{s * (s1 - p1) * (s - p2) * (s - p3)}$$

$$z1 = -1/T1$$

$$p1 = -1/T2$$

$$p2 = -\xi*\omega_n + \text{RAIZ}(1 - \xi^2) = -\sigma + jw_d$$

$$p3 = -\xi*\omega_n - \text{RAIZ}(1 - \xi^2) = -\sigma - jw_d$$

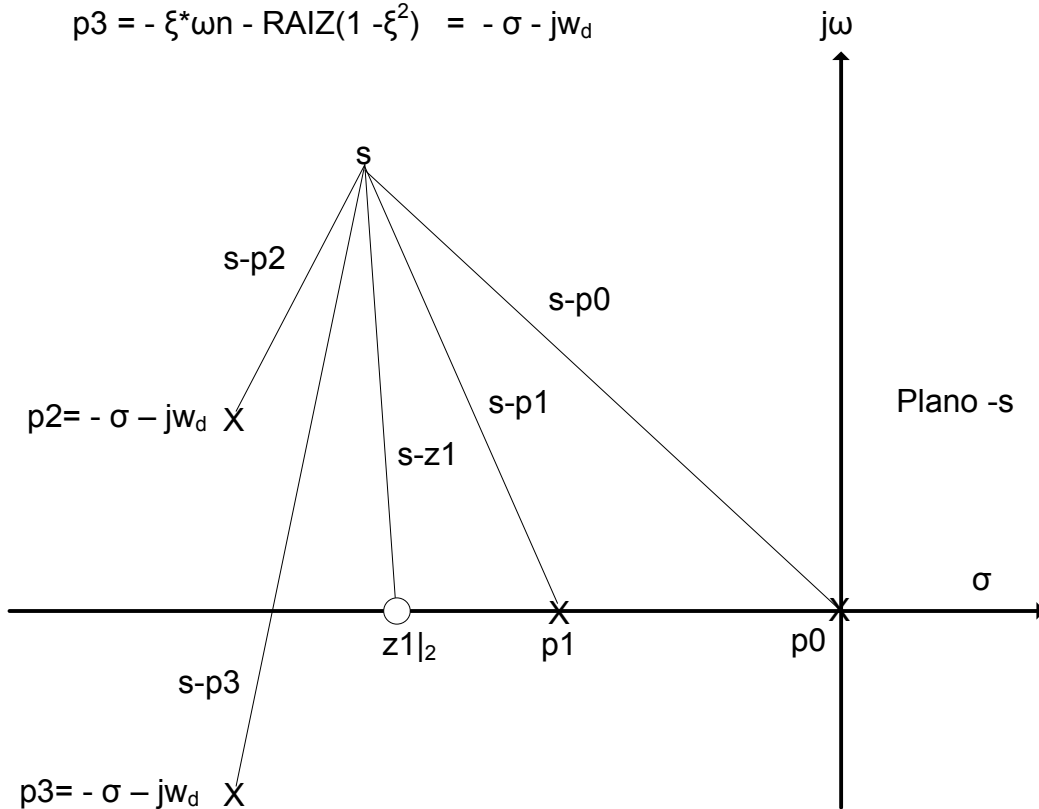


Diagrama de Pólos e Zeros para  $G(s)*H(s)$