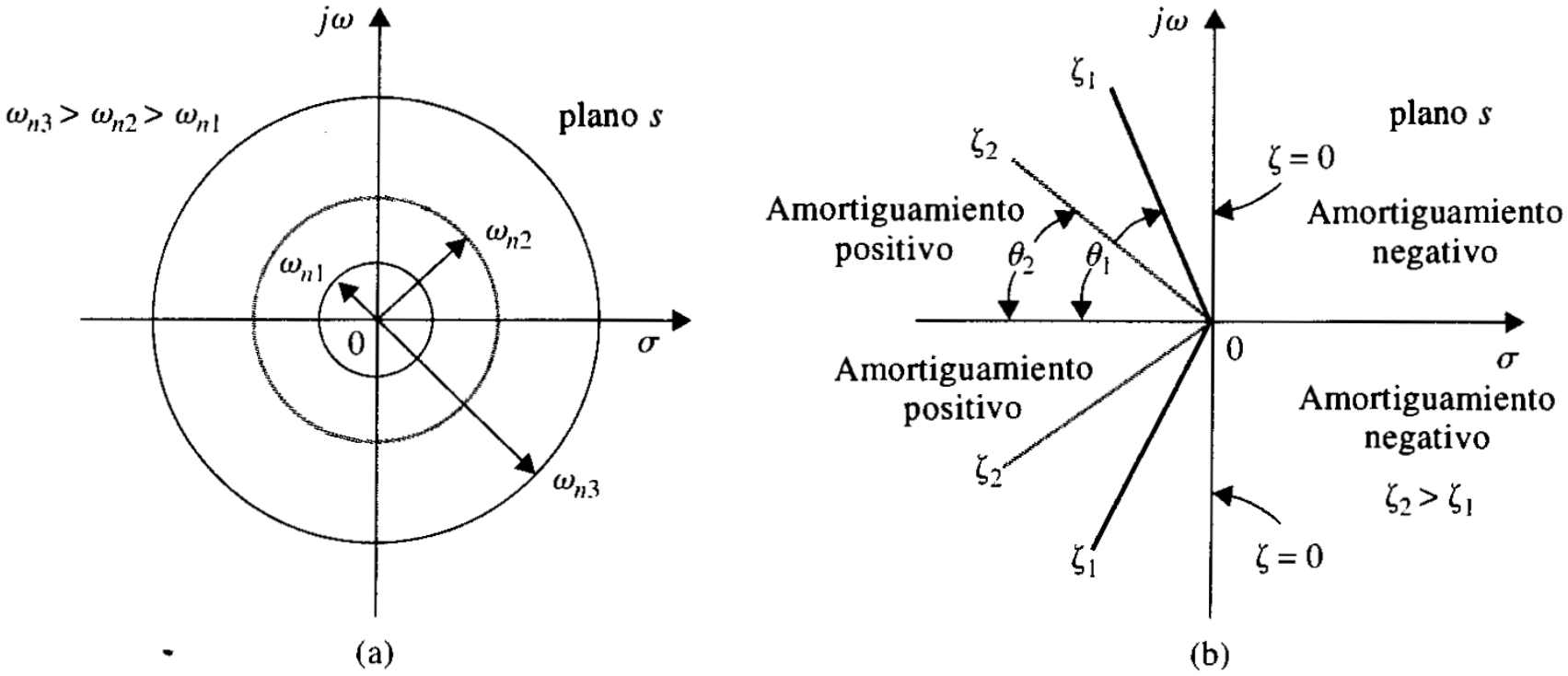
RESPUESTA EN EL TIEMPO

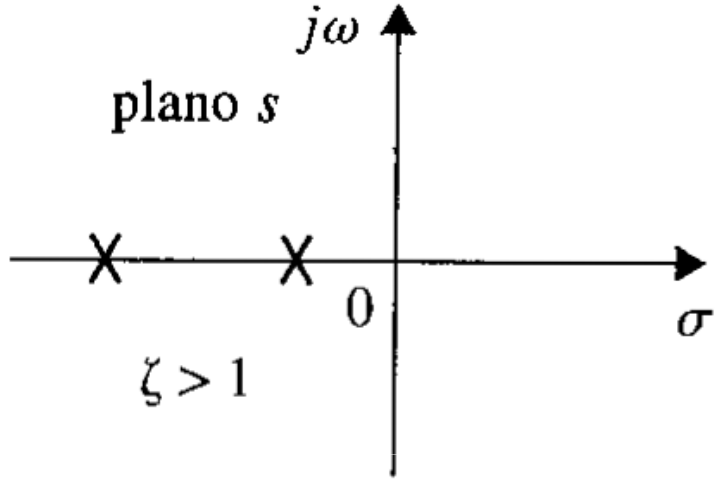
más acerca de los sistemas de 2° orden

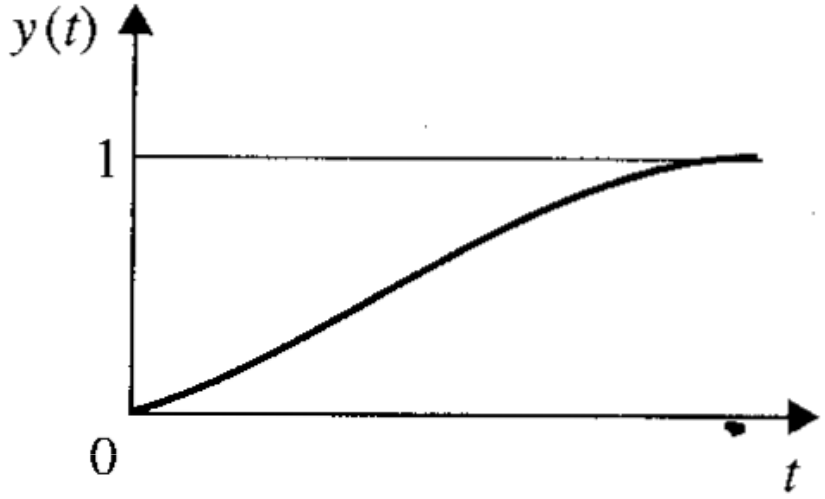
$$T = \frac{\omega_n^{\,2}}{S^2 + 2\xi\varpi_n S + \varpi_n^{\,2}}$$

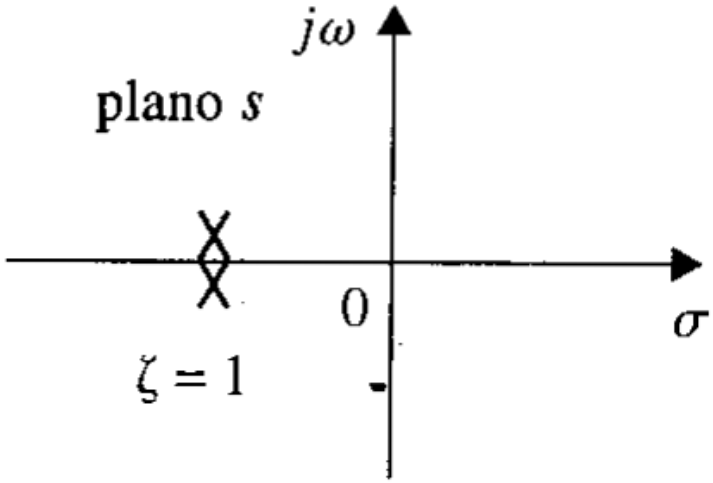


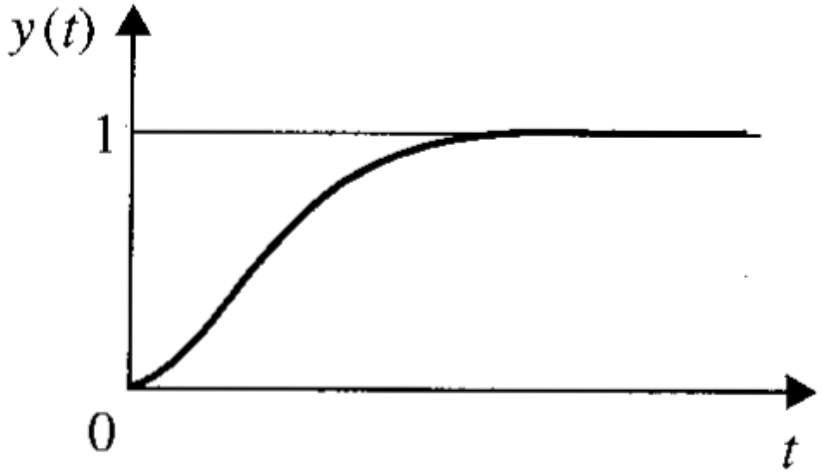
RESPUESTA EN EL TIEMPO

más acerca de los sistemas de 2° orden



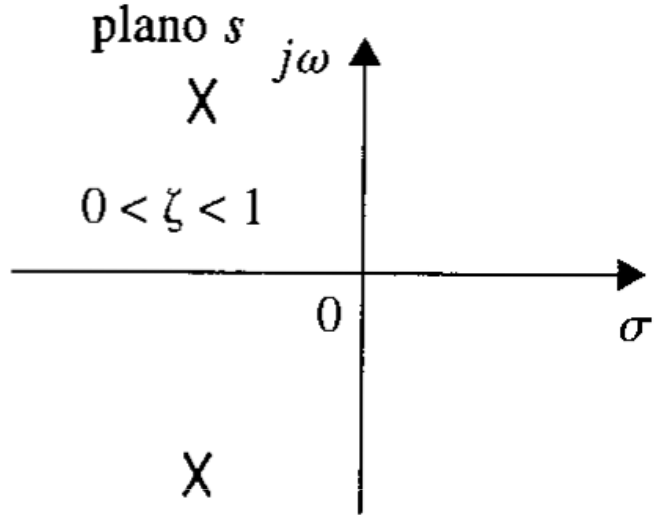


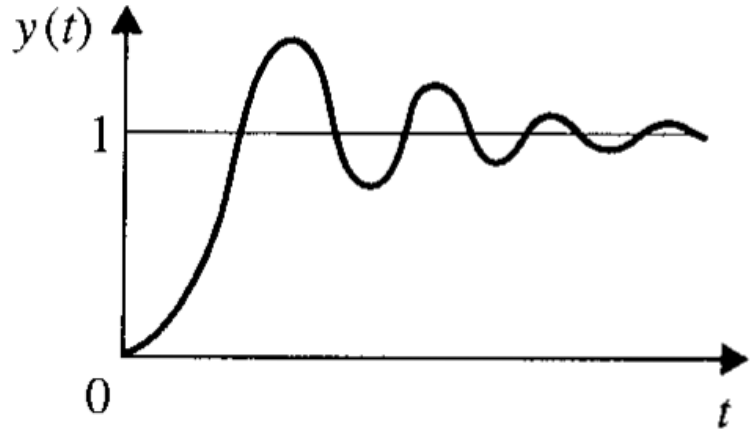


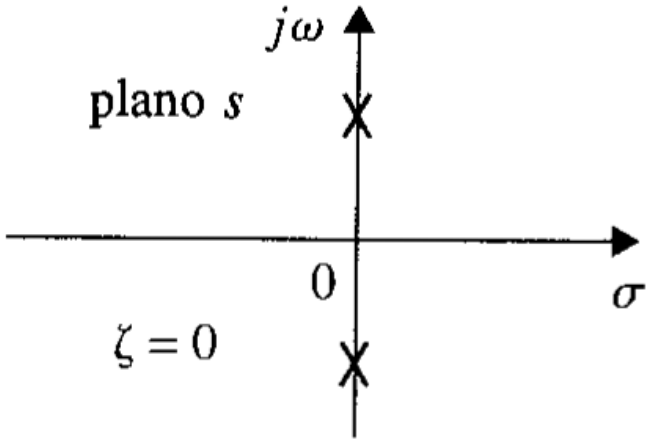


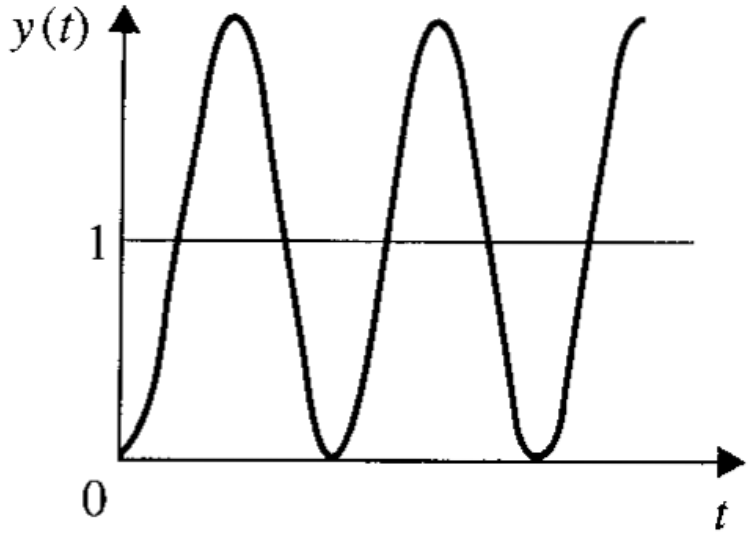
RESPUESTA EN EL TIEMPO

más acerca de los sistemas de 2° orden



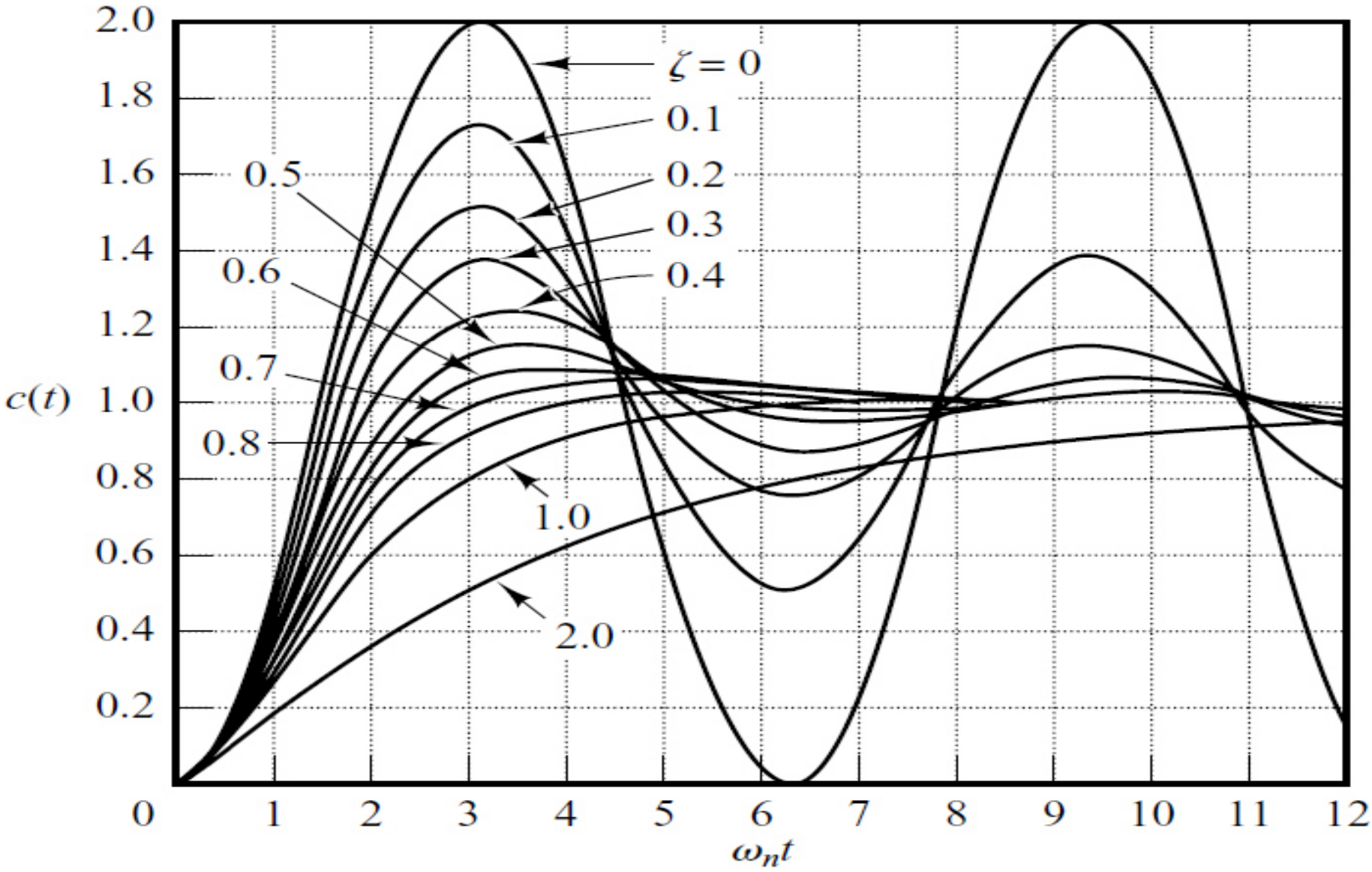






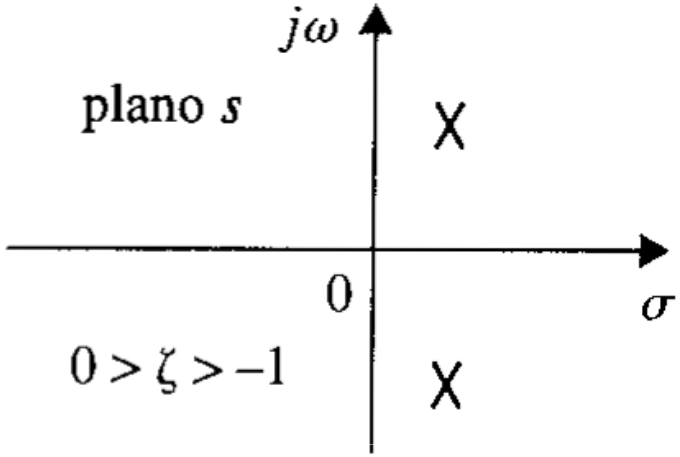
RESPUESTA EN EL TIEMPO

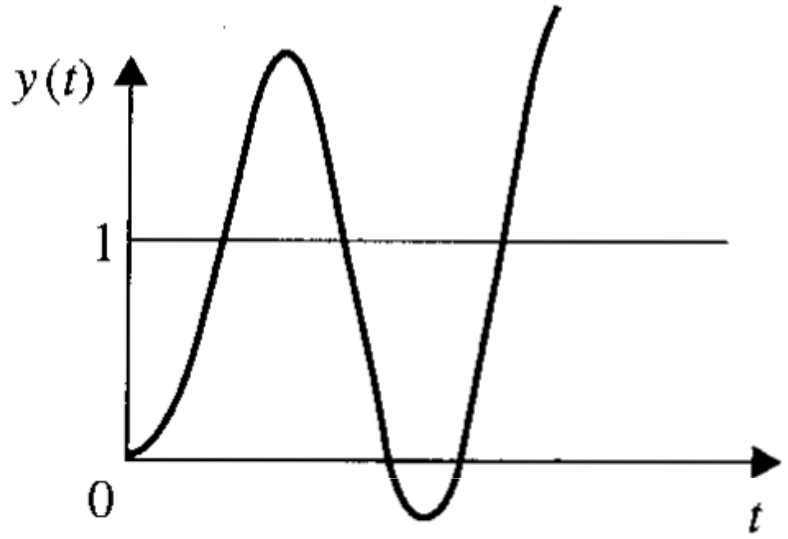
más acerca de los sistemas de 2° orden

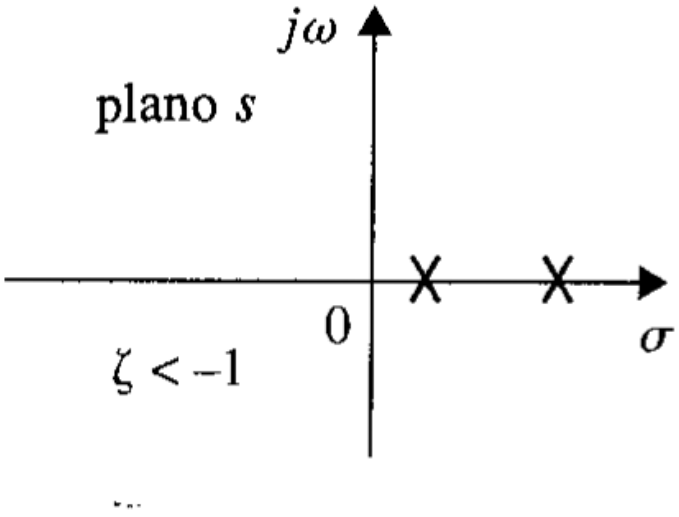


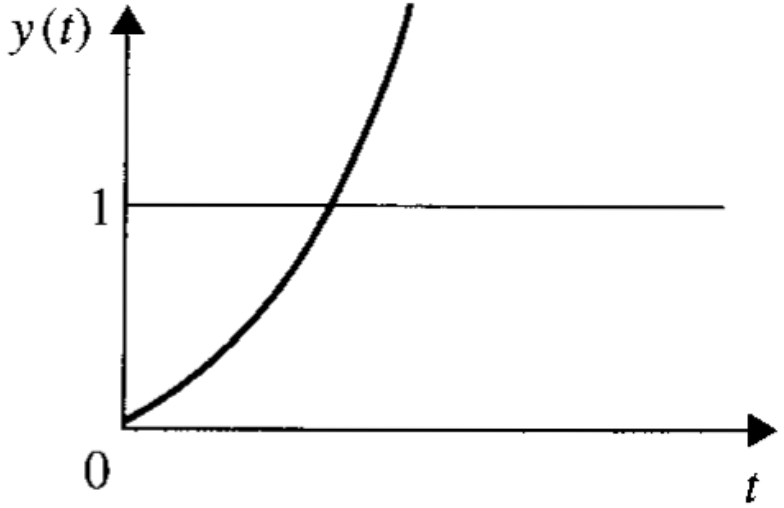
RESPUESTA EN EL TIEMPO

más acerca de los sistemas de 2° orden



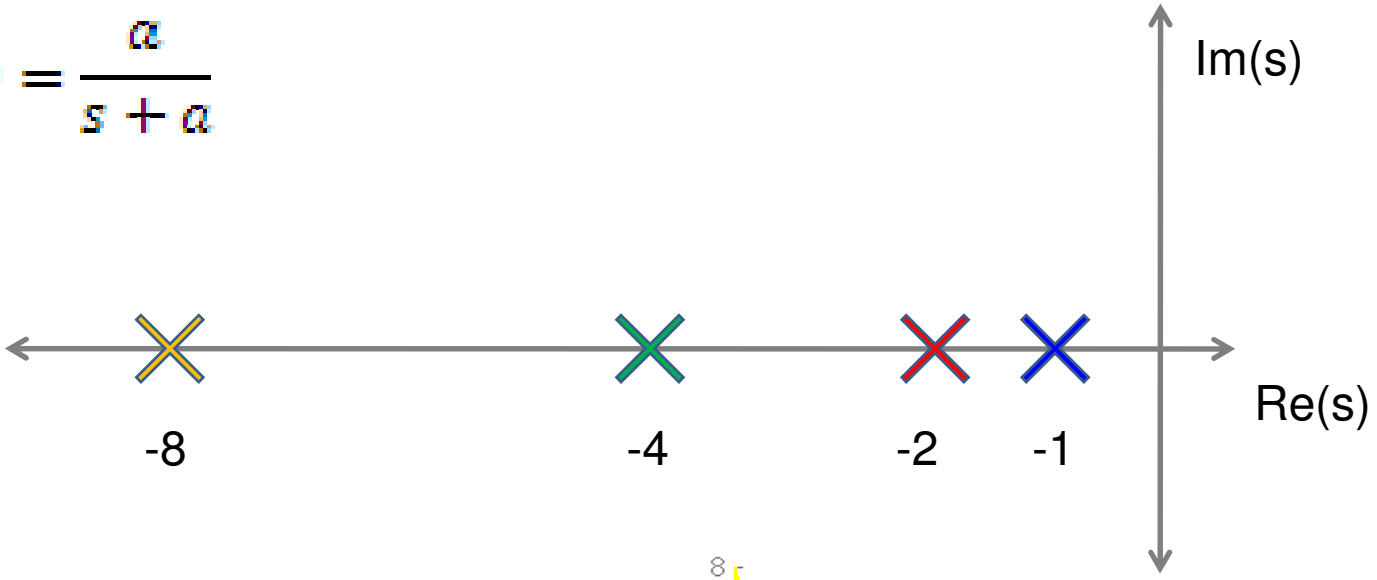




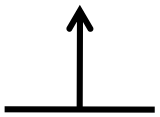


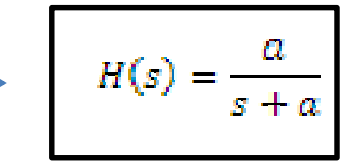
DOMINANCIA Y POLOS DOMINANTES

$$H(s) = \frac{a}{s + a}$$

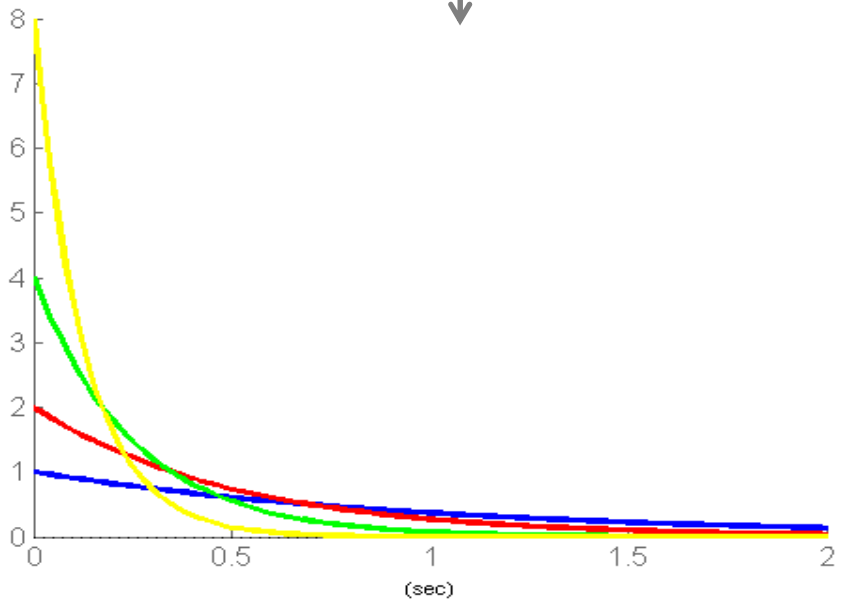


x(t)=δ(t)



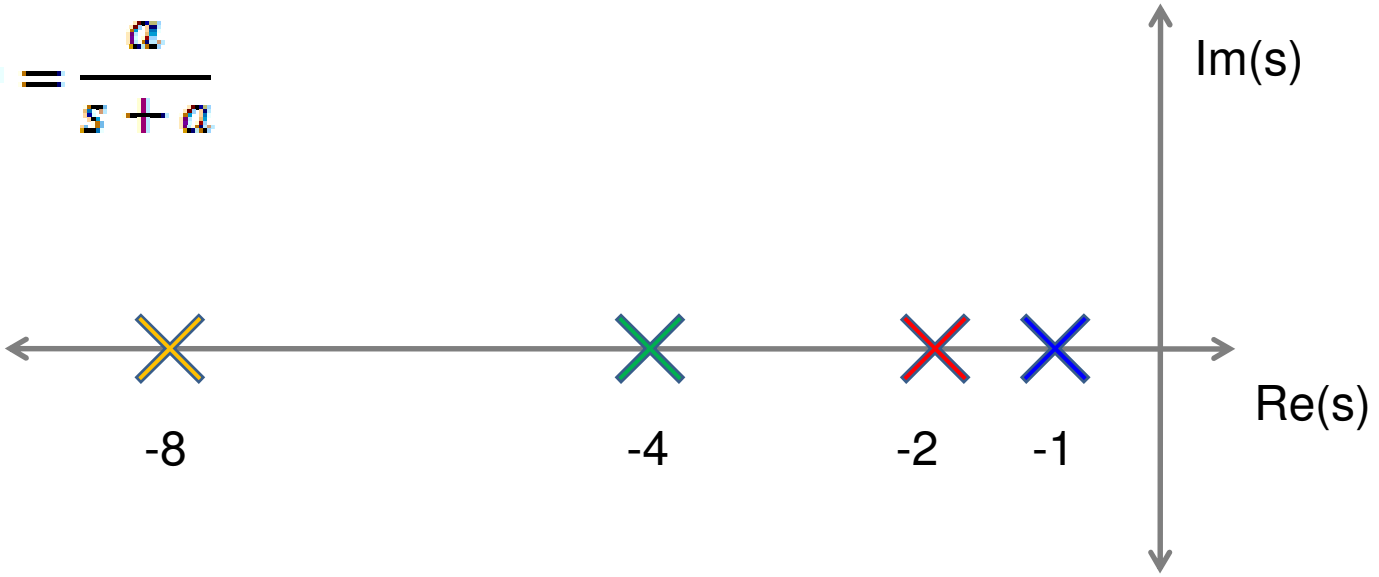


y(t)

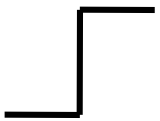


DOMINANCIA Y POLOS DOMINANTES

$$H(s) = \frac{a}{s + a}$$

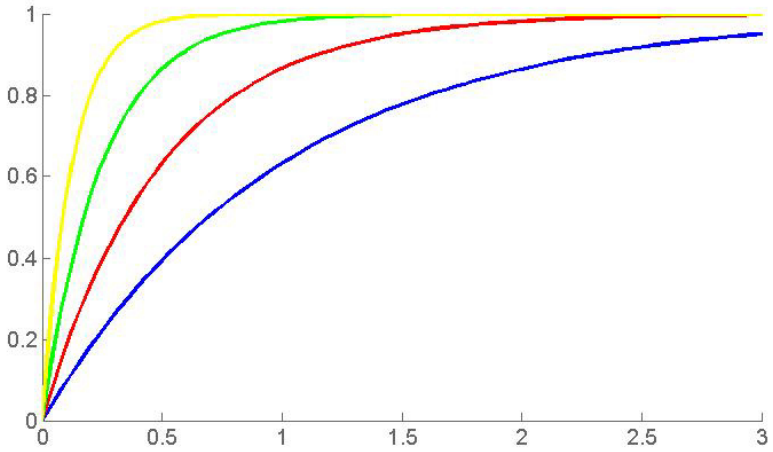


x(t)=u(t)



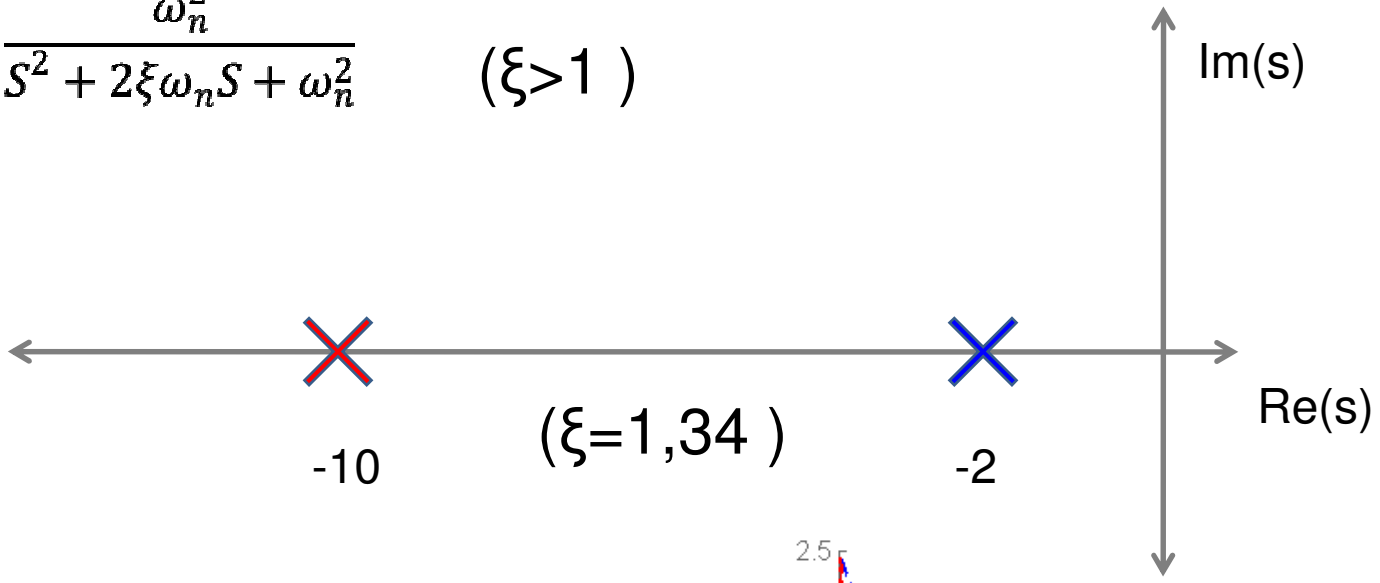
$$H(s) = \frac{a}{s + a}$$

y(t)

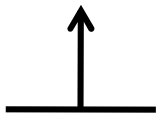


DOMINANCIA Y POLOS DOMINANTES

$$H(s) = \frac{\omega_n^2}{S^2 + 2\xi\omega_n S + \omega_n^2}$$ (ξ>1)



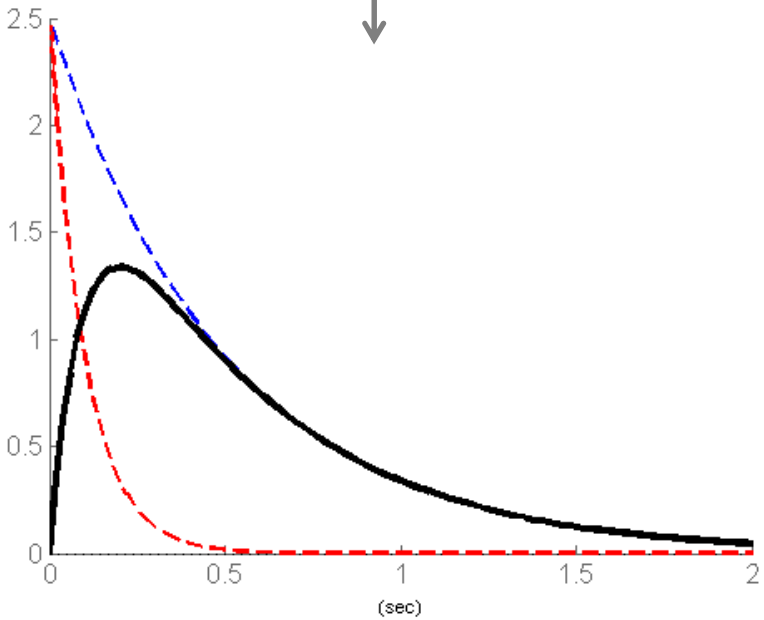
x(t)=δ(t)



$$H(s) = \frac{20}{s^2 + 12s + 20}$$

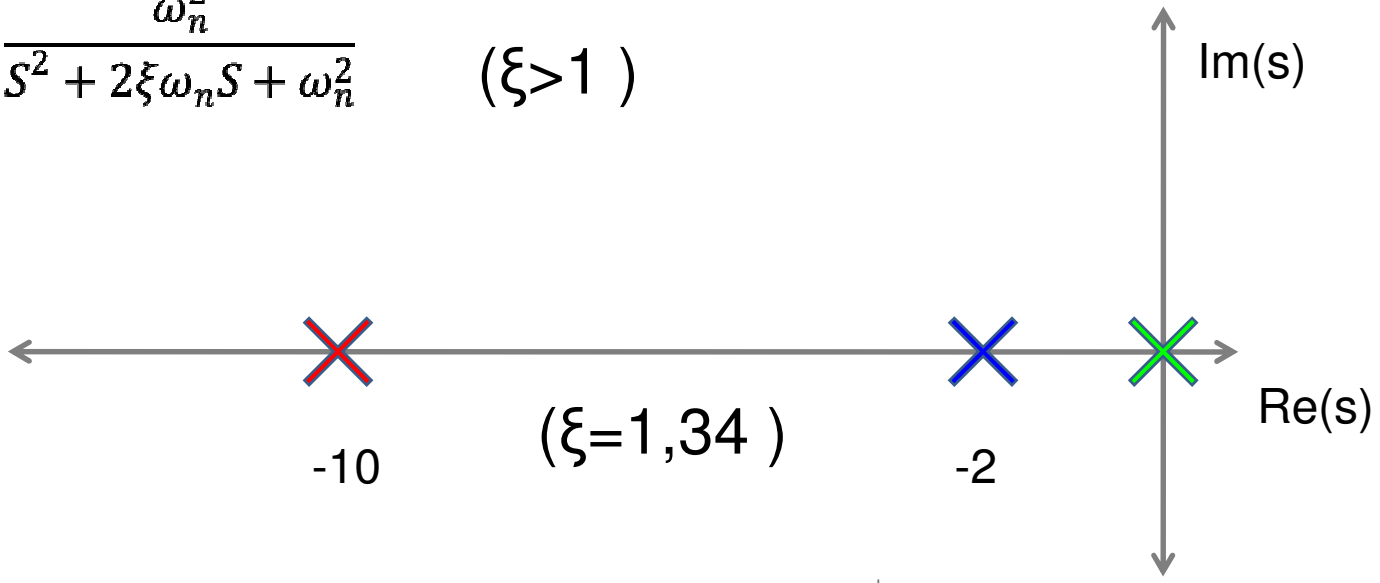
y(t)

$$H(s) = \frac{2.5}{s+2} - \frac{2.5}{s+10}$$

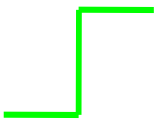


DOMINANCIA Y POLOS DOMINANTES

$$H(s) = \frac{\omega_n^2}{S^2 + 2\xi\omega_n S + \omega_n^2}$$ (ξ>1)



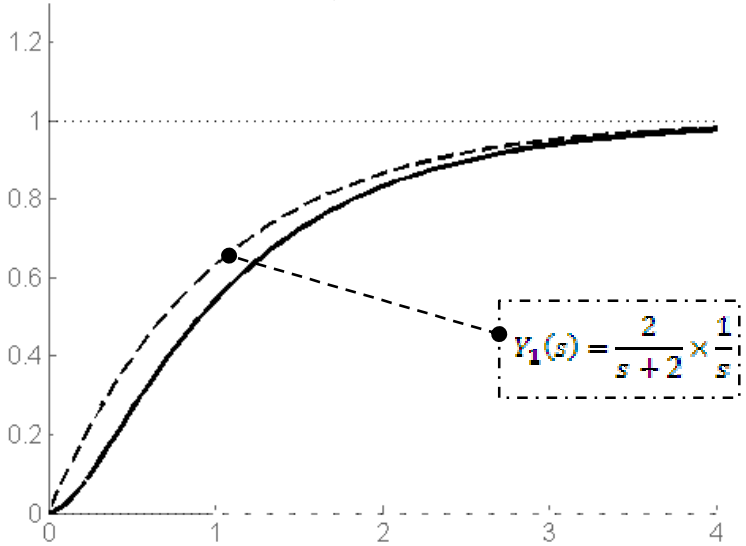
X(t)=U(t)



$$H(s) = \frac{20}{s^2 + 12s + 20}$$

y(t)

$$Y(s) = \frac{1}{s} - \frac{1.25}{s+2} + \frac{0.25}{s+10}$$



DOMINANCIA ¿¿¿???

"Prevalencia del efecto de un grupo de polos (y ceros) en la respuesta temporal de un sistema"

Los polos involucrados son llamados: POLOS DOMINANTES

En el caso de la respuesta al escalón, la dominancia viene dada por la distancia desde los polos dominantes hasta el eje "j": los polos (estables) más cercanos al eje son más dominantes.