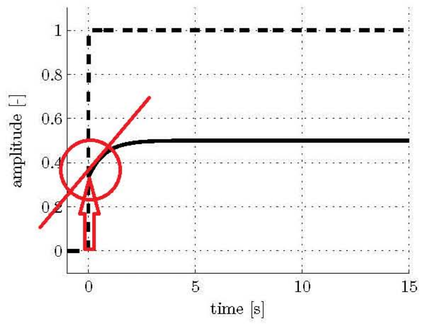
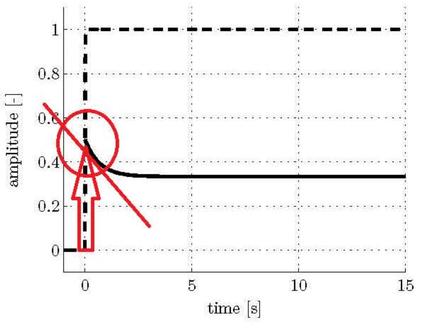
Sprungantwort <-> Kreisverstaerkung L(s)

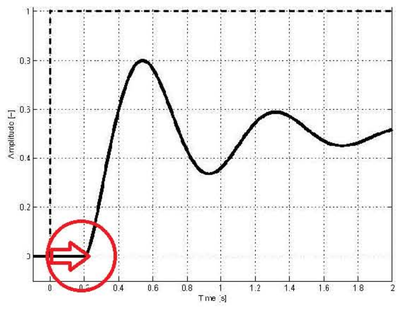
Anfangswert:



⇨ relativer Grad r=0 , $\frac{(1/t\_n *s+1)}{(1/t\_p*s+1)}$, mit t_n > t_p

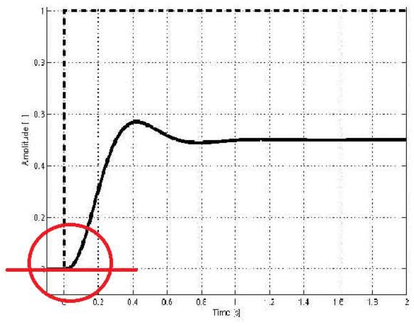


⇨ relativer Grad r=0 , $\frac{(1/t\_n *s+1)}{(1/t\_p*s+1)}$, mit t_n < t_p

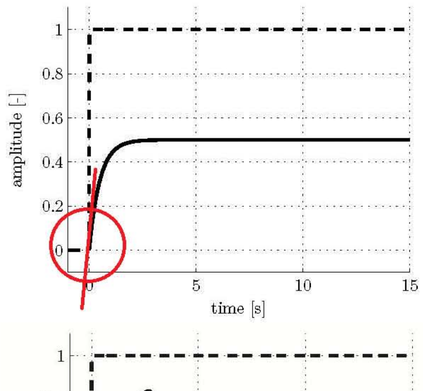


⇨ Totzeit exp{-s*T}

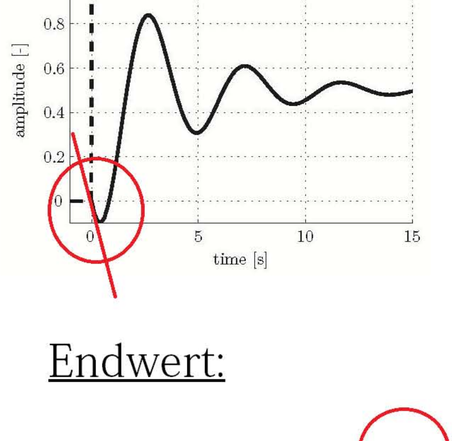
Anfangssteigung:



⇨ relativer Grad r>=2

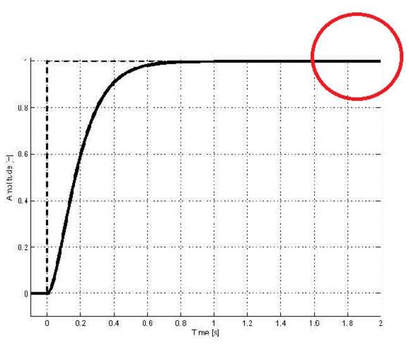


⇨ relativer Grad r=1

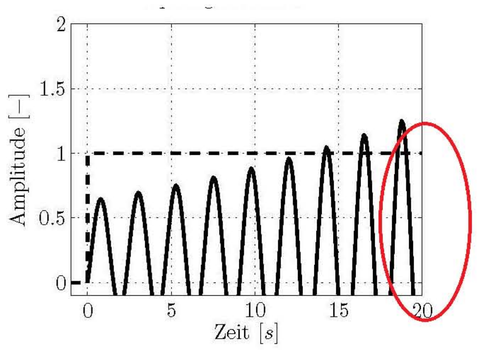


⇨ Nichtminimalphasige Nullstelle , (1/t*s-1)

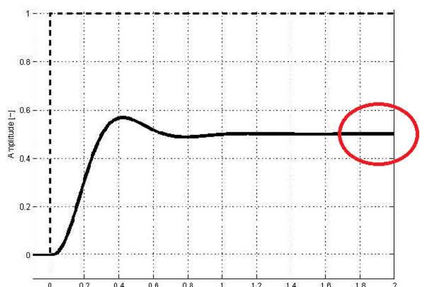
Endwert:



⇨ es gibt mind. 1 Integrator , 1/(t*s)



⇨ instabiler Pol , $\frac{1}{(1/t*s-1)}$



⇨ Endwerttheorem benutzen um den statischen Fehler zu berechnen:

E_stat=S(0)