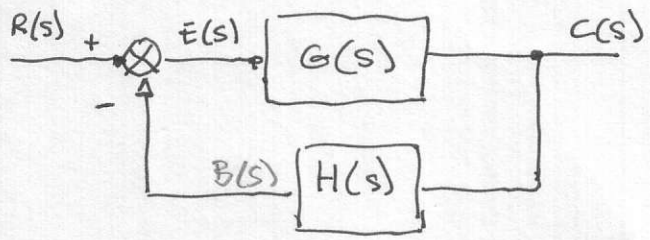
Ejemplo: libro TZ Ed. Donostiarra. Pág. 226.



Donde $\begin{cases} G(s) = s \\ H(s) = s \end{cases}$

$$\left.\begin{array}{l} E(s) = R(s) - B(s) \\ B(s) = C(s) \cdot H(s) \\ C(s) = E(s) \cdot G(s) \end{array}\right\} \rightarrow E(s) = R(s) - C(s) \cdot H(s)$$

$$\rightarrow E(s) = \frac{C(s)}{G(s)}$$

$$\frac{C(s)}{G(s)} = R(s) - C(s) \cdot H(s) \Rightarrow \frac{C(s)}{G(s)} + C(s) \cdot H(s) = R(s)$$

$$\Rightarrow C(s)\left[\frac{1}{G(s)} + H(s)\right] = R(s) \Rightarrow \frac{C(s)}{R(s)} = \frac{1}{\frac{1}{G(s)} + H(s)}$$

$$\Rightarrow \frac{C(s)}{R(s)} = \frac{1}{\frac{1 + G(s) \cdot H(s)}{G(s)}} = \frac{G(s)}{1 + G(s) \cdot H(s)}$$

$$R(s) \rightarrow \boxed{M(s)} \rightarrow C(s) \quad \Rightarrow M(s) = \frac{C(s)}{R(s)} = \frac{G(s)}{1 + G(s) \cdot H(s)}$$

Sustituyendo valores $\begin{cases} G(s) = s \\ H(s) = s \end{cases}$ Queda:

$$\boxed{M(s) = \frac{s}{1 + s^2}}$$