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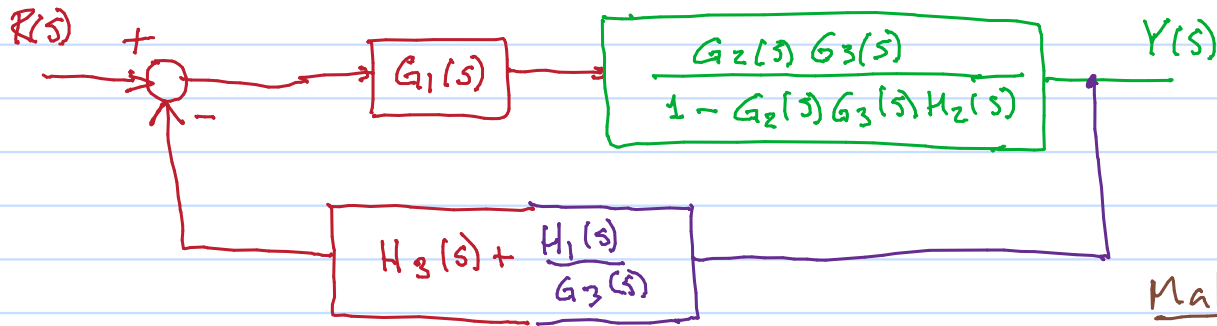


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# Detalhamento e correção do algoritmo de blocos do vídeo: álgebra de diagrama de blocos.



Ramo Direto:

$$RD = \frac{G_1 G_2 G_3}{1 - G_2 G_3 H_2}$$

Malha Aberta:  $MA = RD \cdot \frac{H_3 G_3 + H_1}{G_3}$

Malha Fechada:  $\frac{Y(s)}{R(s)} = \frac{RD}{1 + MA} = \frac{\frac{G_1 G_2 G_3}{1 - G_2 G_3 H_2}}{1 + \frac{G_1 G_2 G_3}{1 - G_2 G_3 H_2} \cdot \frac{H_3 G_3 + H_1}{G_3}}$

→ Em verde está a correção. No vídeo aparece  $H_3(s)$ .

$$\frac{Y(s)}{R(s)} = \frac{\frac{G_1 G_2 G_3}{1 - G_2 G_3 H_2}}{1 + \frac{G_1 G_2 G_3}{1 - G_2 G_3 H_2} \cdot \frac{H_3 G_3 + H_1}{G_3}} = \frac{\frac{G_1 G_2 G_3}{1 - G_2 G_3 H_2}}{1 - G_2 G_3 H_2 + G_1 G_2 G_3 H_3 + G_1 G_2 H_1}$$

Este algoritmo não aparece no vídeo

Mesmo resultado final do vídeo