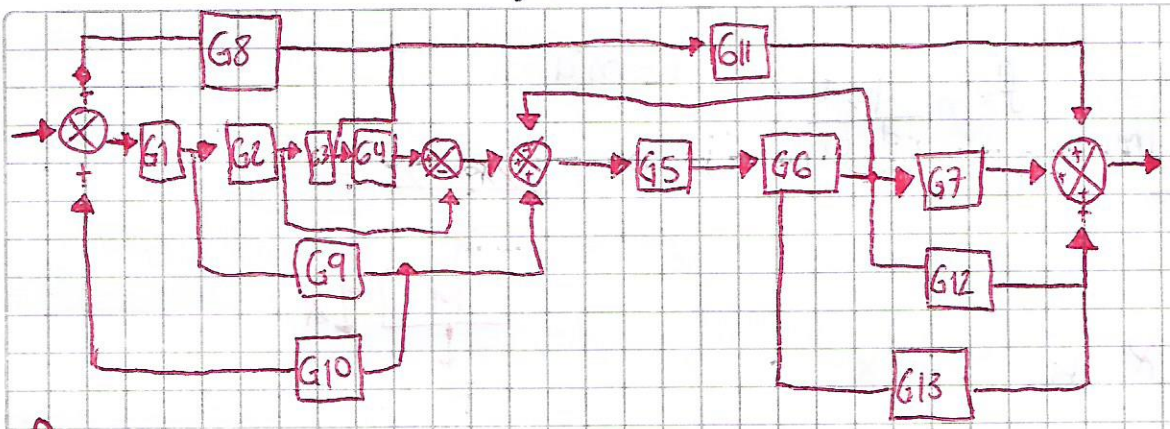
Isidoro Edward Pérez A.

24/01/20



Flujo de señales

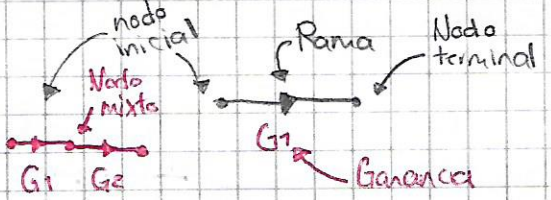
Δ_k → Determinante = 1 - (Σ lazos que no se tocan ese trayecto)

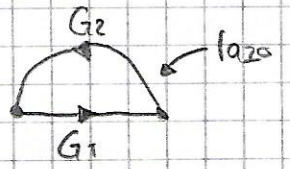
Δ → Coefactor = 1 - (Σ lazos que no tocan ese trayecto) + (Σ de lazos disjuntos que no tocan ese trayecto) - (Σ 3 lazos

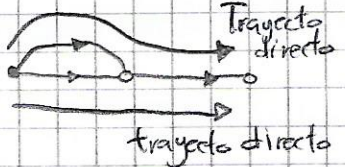
M_k → trayecto directo

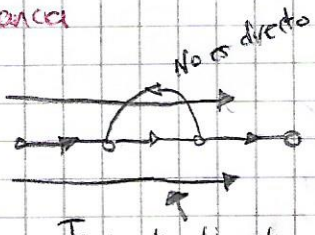
L_k → lazo

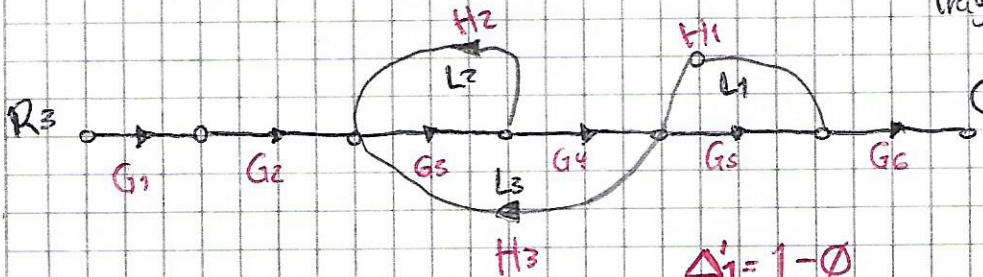
$$G(s) = \frac{\Sigma M_k \Delta_k}{\Delta}$$











$M_1 = G_1 G_2 G_3 G_4 G_5 G_6$

$\Delta_1' = 1 - \emptyset$

$\Delta = 1 - (L_1 + L_2 + L_3) + (L_1 L_2)$

Lazos

$L_1 = G_5 H_1$

$L_2 = G_3 H_2$

$L_3 = G_3 G_4 H_3$

Lazos disjuntos

$L_1 L_2 = G_5 H_1 G_3 H_2$

$$G(s) = \frac{G_1 G_2 G_3 G_4 G_5 G_6}{1 - G_5 H_1 - G_3 H_2 - G_3 G_4 H_3 + G_5 G_3 H_1 H_2}$$