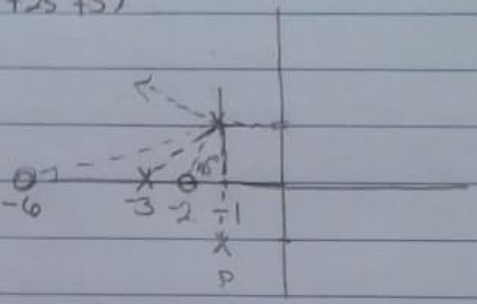
Tarea #11
Daniel Aleman Saborio

Tarea Nº 11

Daniel Alemán Saborío

$$G(S)\cdot H(S) = \frac{(S^2+8S+12)}{(S+3)(S^2+2S+5)} \rightarrow (-1+2i)(-1-2i)$$

$$G(S)\cdot H(S) = \frac{(S+2)(S+6)}{(S+3)(S^2+2S+5)} =$$



Centroide

$$\frac{b_{q-1} - a_{n-1}}{b - a}$$

$n = 3$. $\quad n - q = 3 - 2 = 1$

$q = 2$

$$\sum_{j=1}^{n} P_1 = -3 + 2R_e(-1) = -3 + -2.1 = -5$$

$$\sum_{i=1}^{n} z_1 = -2 + -6 = -8$$

Angulo de Salida

$$\phi_p = 180° + \sum_{i=1}^{n} \phi_{z} - \sum_{i=1}^{n} \phi_{p1}$$

$\sum \phi_z = 45 + 11{,}31 = 56{,}31 \quad \sum_{i=1}^{n} \phi_p = 90 + 26{,}56 = 116{,}56$

$\phi_p = 180° + 56{,}31 - 116{,}56 = 119{,}75$