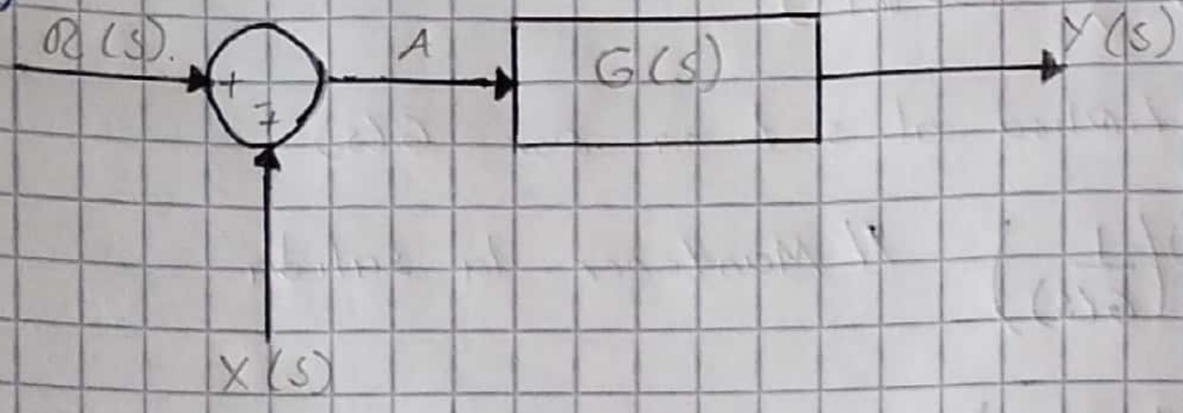
Nombre: Oscar David Poblador Parra
Código: 2021100S116

Tarea 7

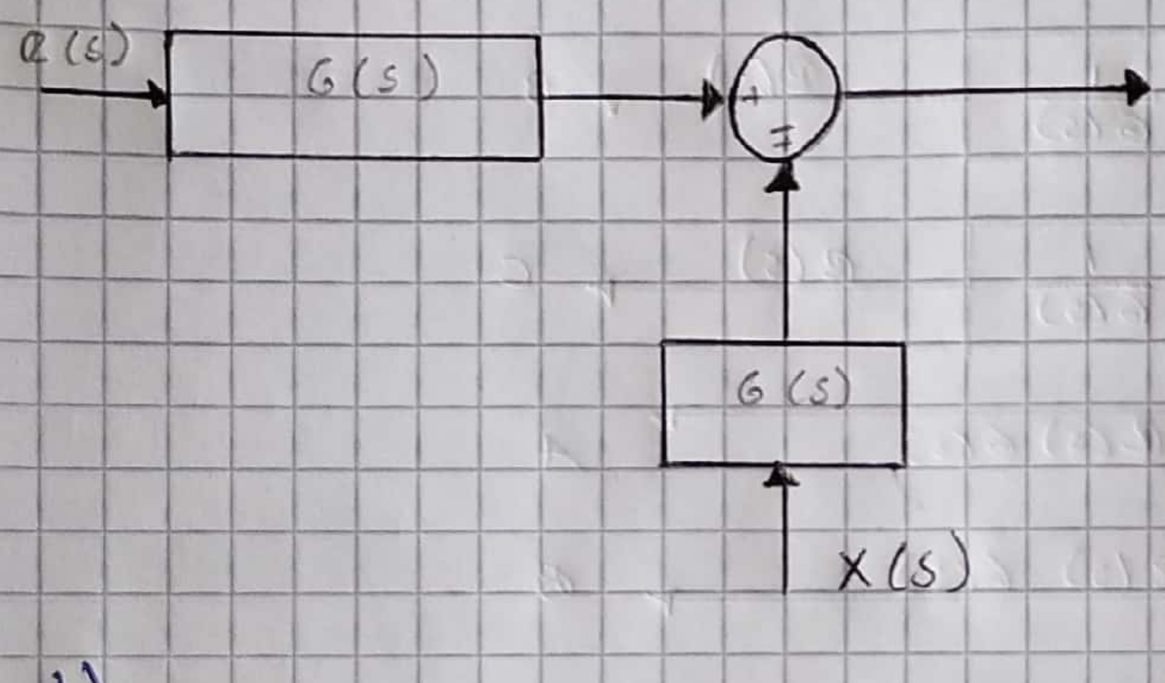
- Considere los siguientes sistemas

a)

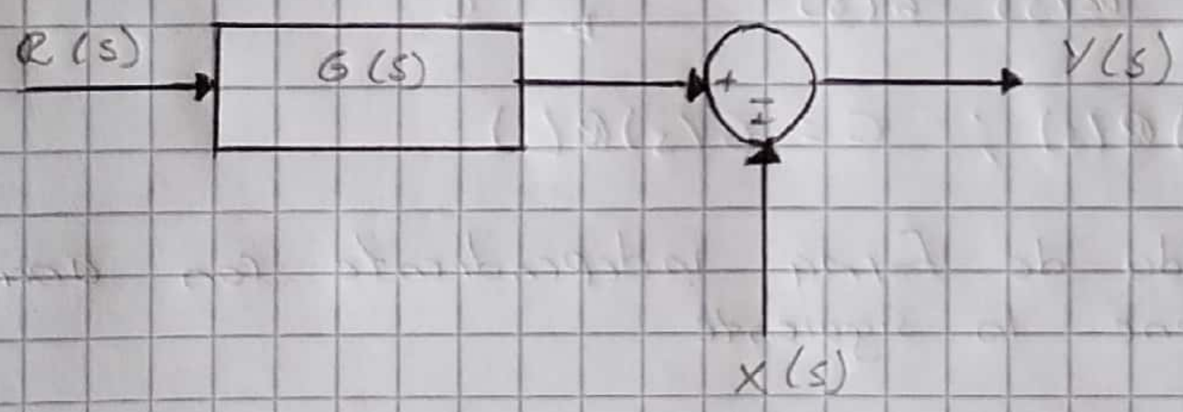


$Y(s) = G(s)A \rightarrow Y(s) = G(s)(R(s) \mp X(s))$

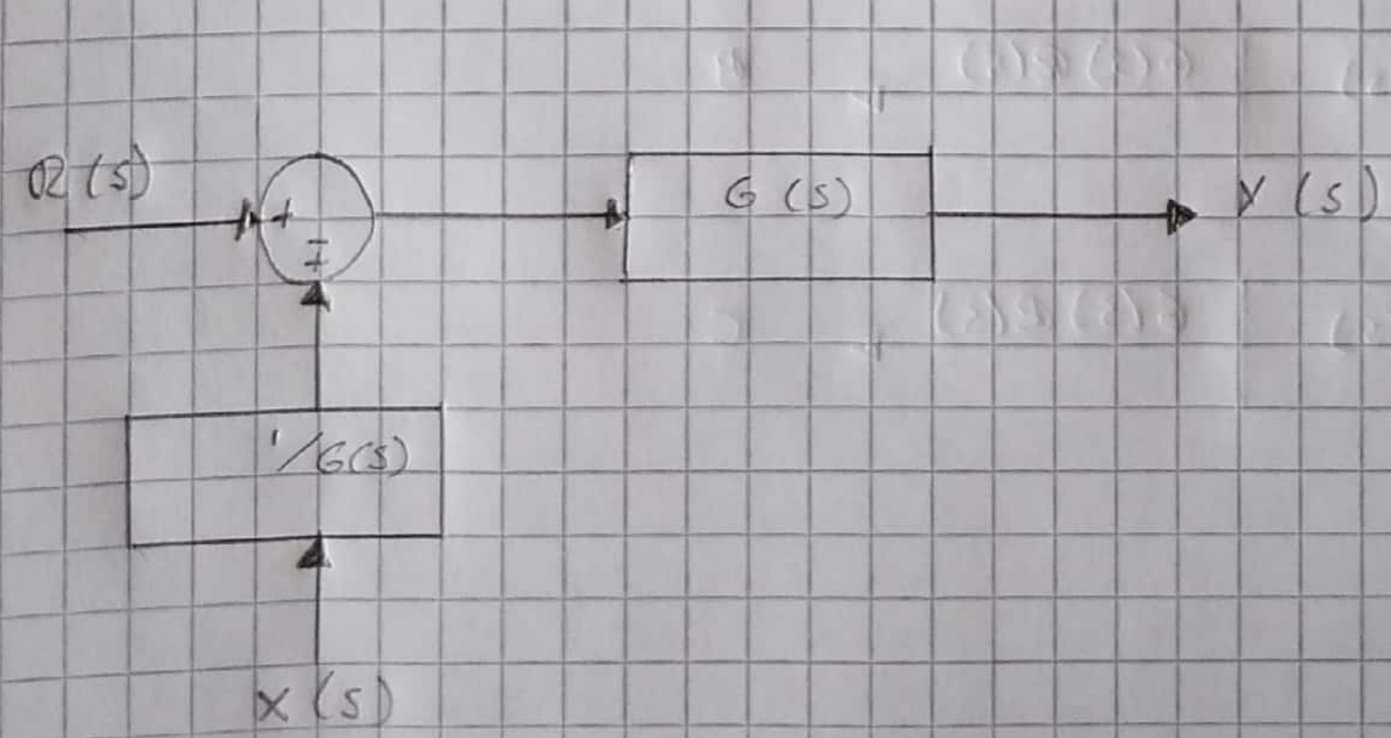
$Y(s) = G(s)R(s) \mp G(s)X(s)$



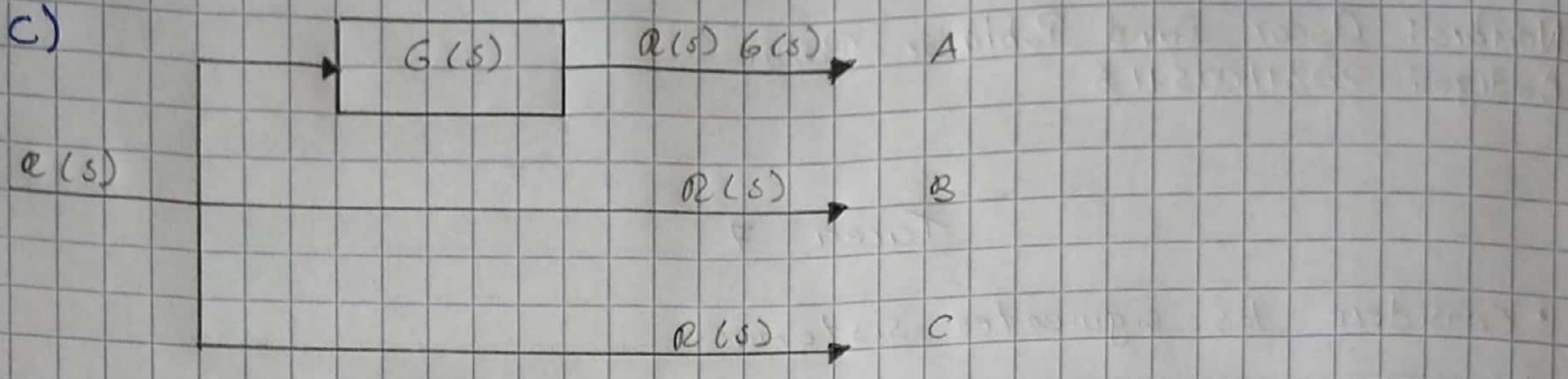
b)



$Y = G(s)R(s) \mp X(s) \rightarrow Y(s) = \left(R(s) \mp \frac{X(s)}{G(s)}\right) G(s)$



c)



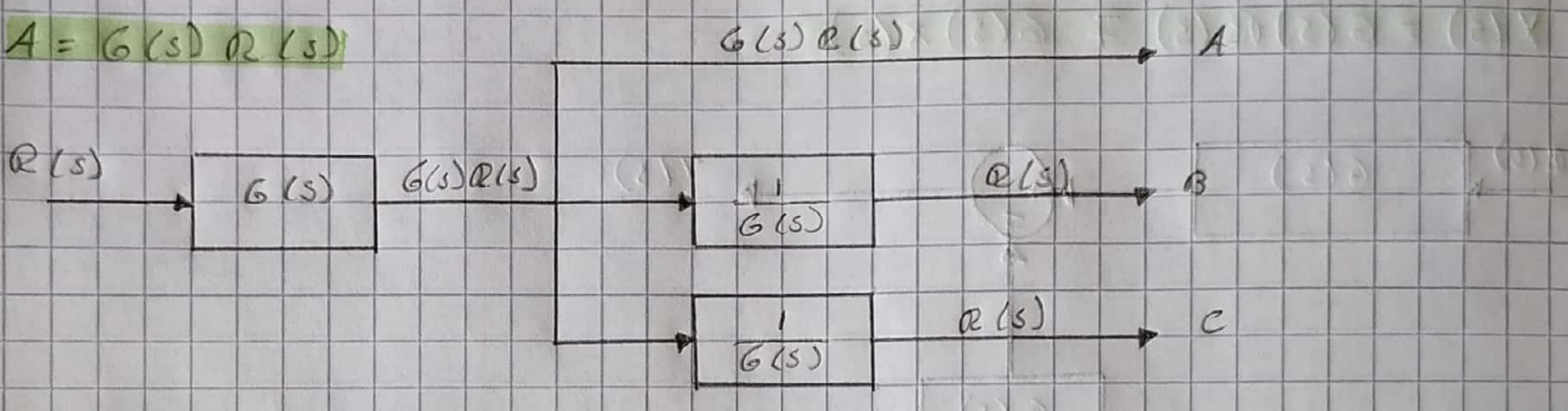
$A = G(s)\,R(s)$; $B = R(s)$; $C = R(s)$

✓ Si a la entrada se multiplica al sistema por $G(s)$

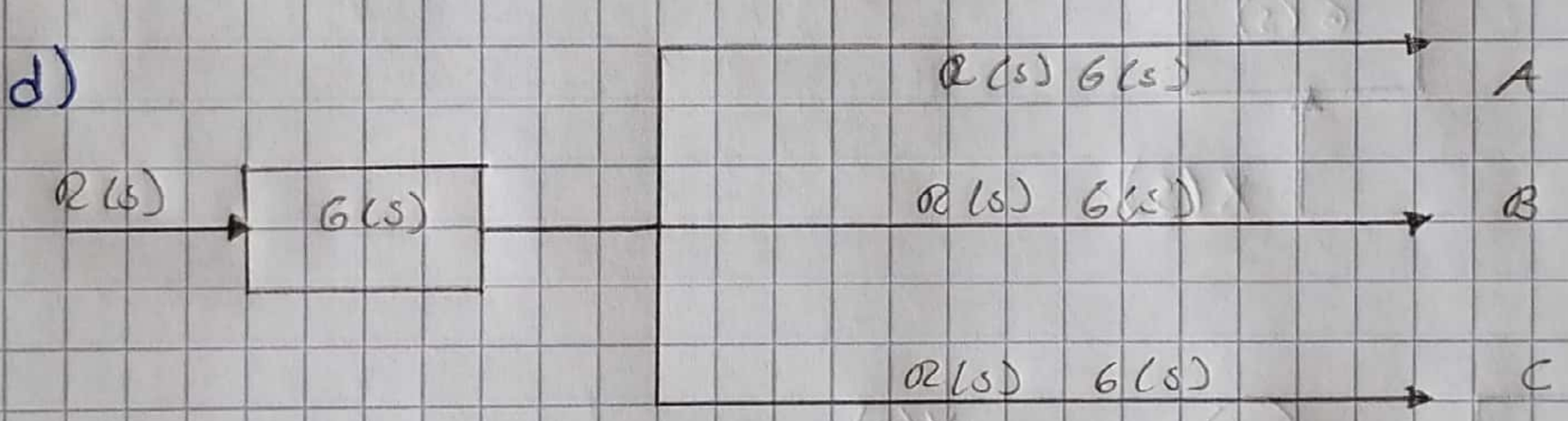
$B \cdot G(s) = G(s) \cdot R(s) \cdot \left(\frac{1}{G(s)}\right)$ // Mantener la salida

$C \cdot G(s) = G(s) \cdot R(s) \cdot \left(\frac{1}{G(s)}\right)$

$A = G(s)\,R(s)$



d)



$A = G(s)\,R(s)$; $B = G(s)\,R(s)$; $C = G(s)\,R(s)$

✓ Al considerar cada salida de forma independiente con una entrada en común se tiene lo siguiente