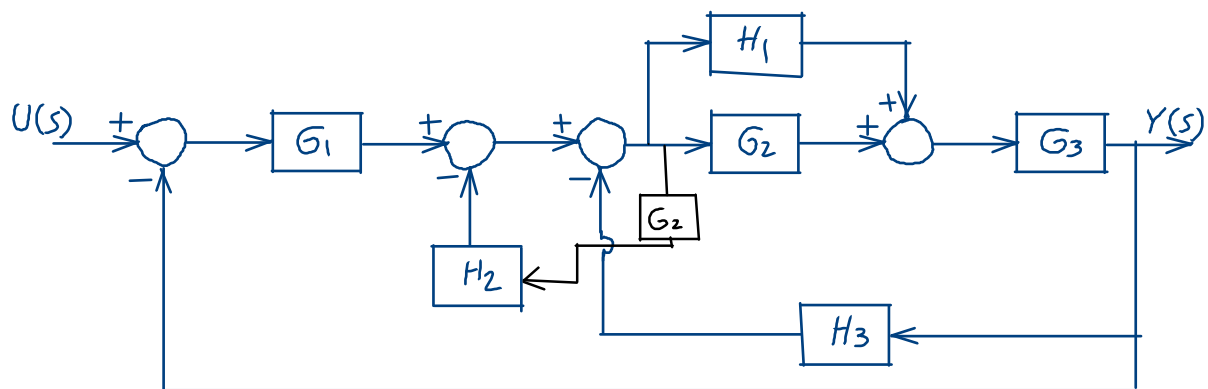
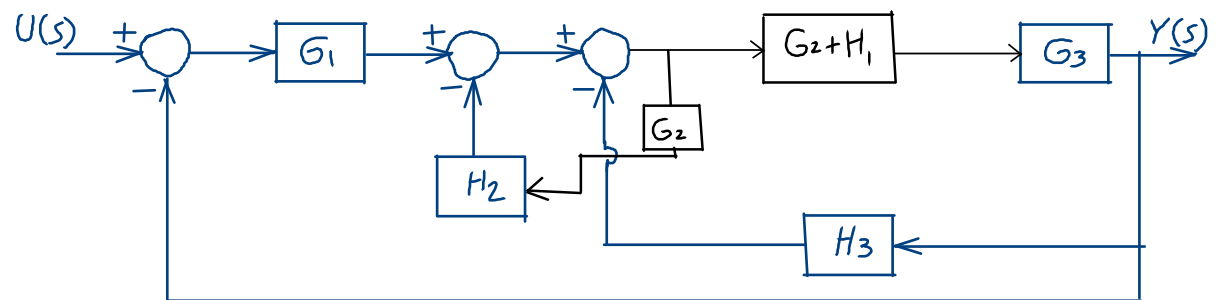


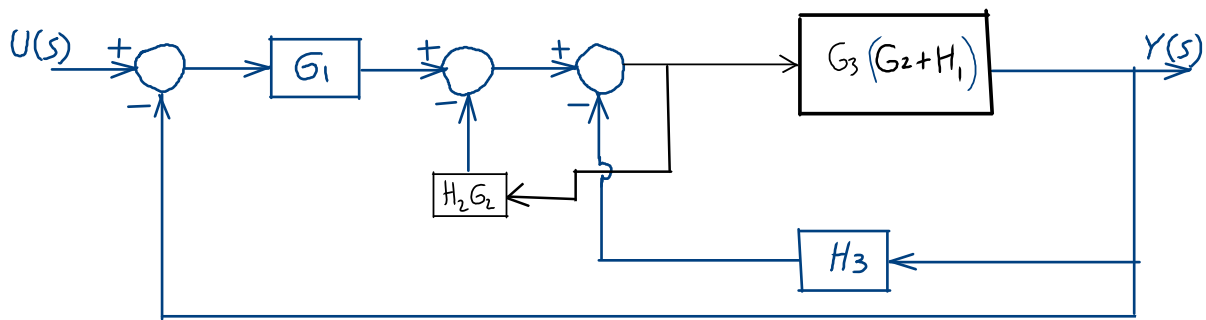
Inicial



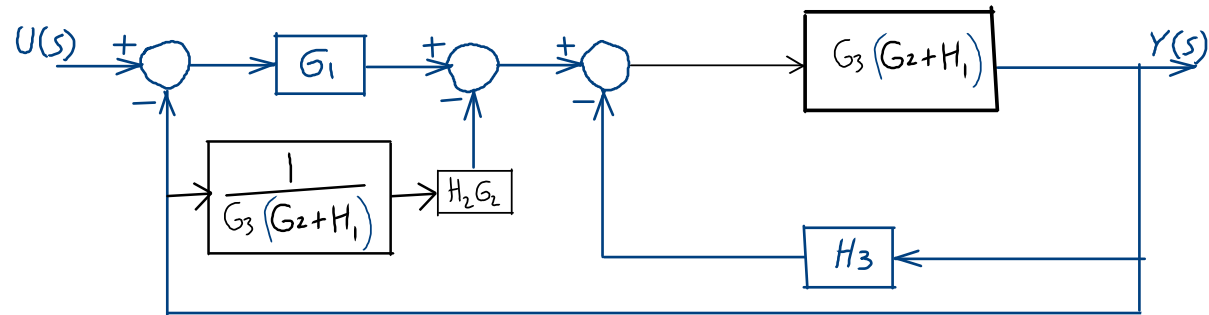
Mover punto de bifurcación
ubicado posterior a un bloque



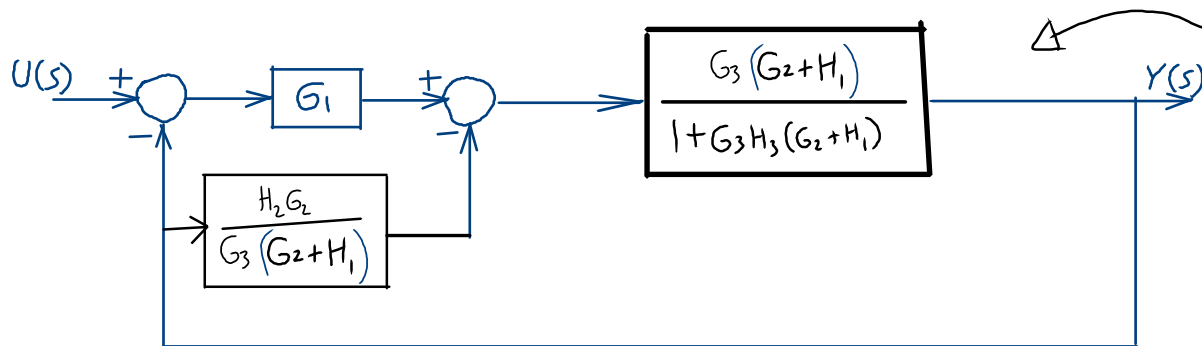
Combinación en paralelo



- Combinación en cascada

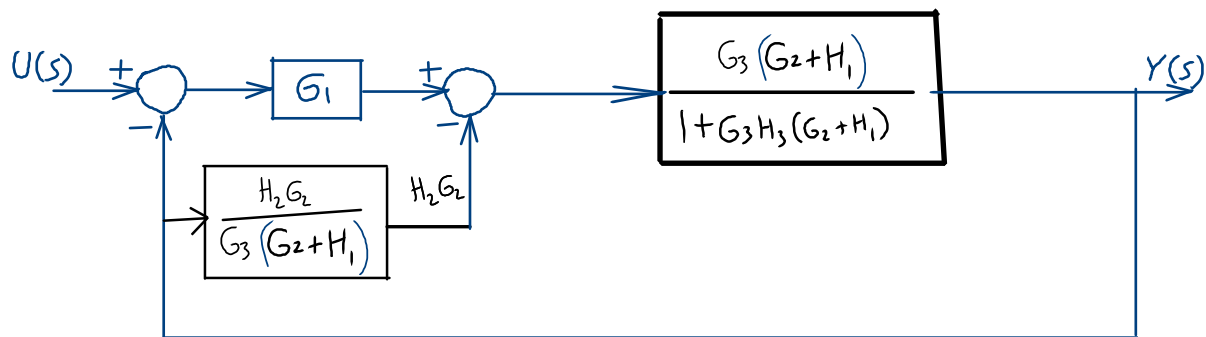


- Mover punto de bifurcación ubicado anterior a un bloque

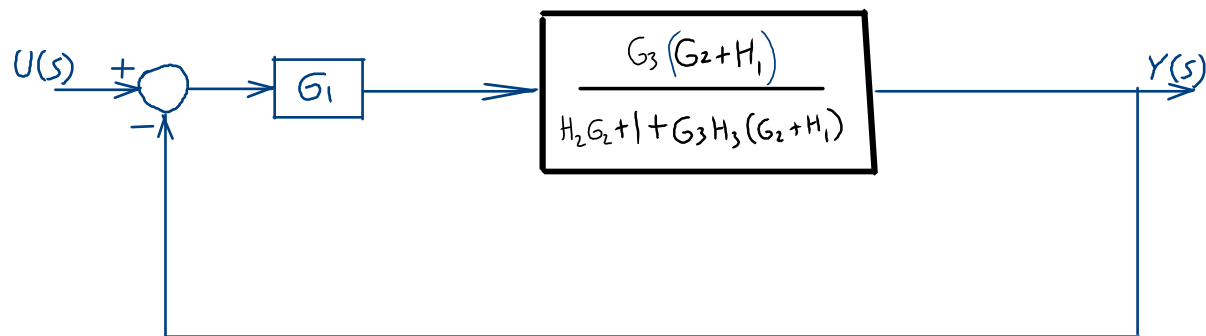


- Eliminar lazo de realimentación

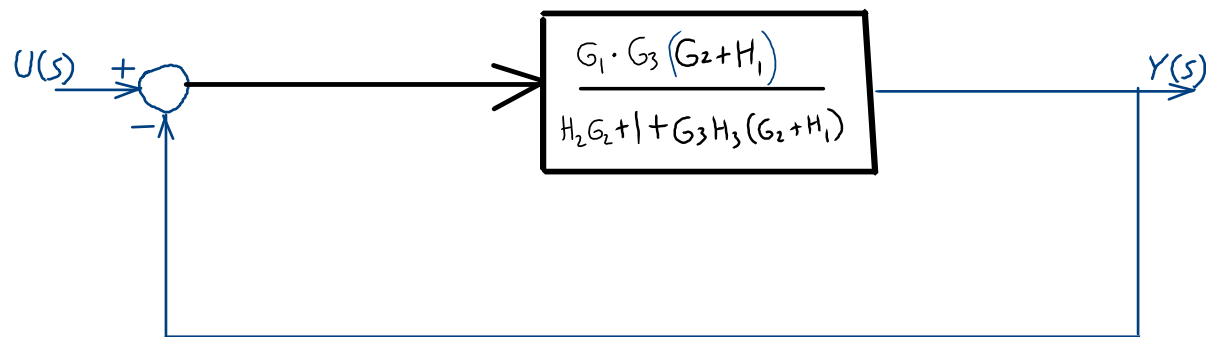
- Combinación en cascada



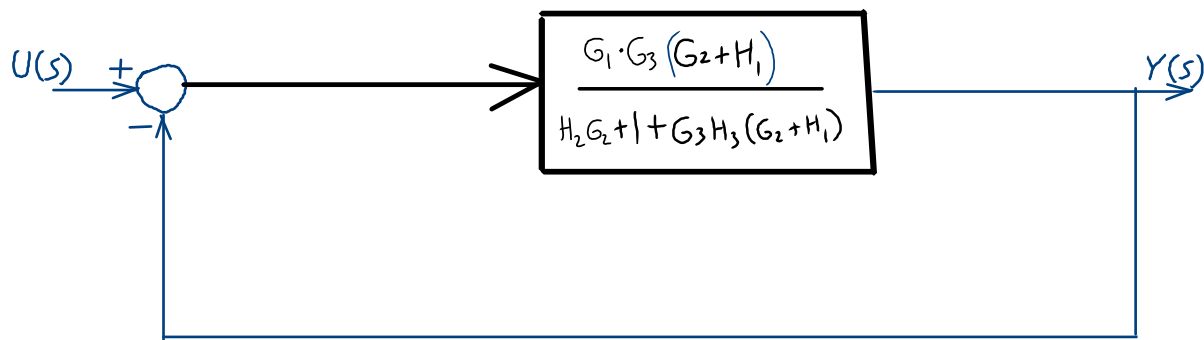
$$\frac{\frac{G_3(G_2+H_1)}{1+G_3H_3(G_2+H_1)}}{1 + \frac{H_2G_2}{G_3(G_2+H_1)} \cdot \frac{G_3(G_2+H_1)}{1+G_3H_3(G_2+H_1)}} = \frac{\frac{G_3(G_2+H_1)}{1+G_3H_3(G_2+H_1)}}{1 + \frac{H_2G_2}{1+G_3H_3(G_2+H_1)}} = \frac{\frac{G_3(G_2+H_1)}{1+G_3H_3(G_2+H_1)}}{\frac{H_2G_2 + 1 + G_3H_3(G_2+H_1)}{1+G_3H_3(G_2+H_1)}} = \frac{G_3(G_2+H_1)}{H_2G_2 + 1 + G_3H_3(G_2+H_1)}$$



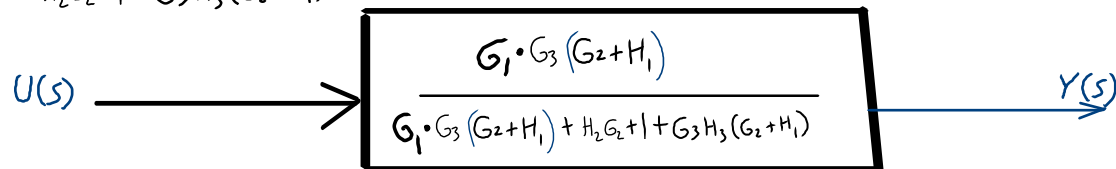
- Eliminar lazo de realimentación



- Combinar en cascada



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



- Eliminar lazo de realimentación

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

//