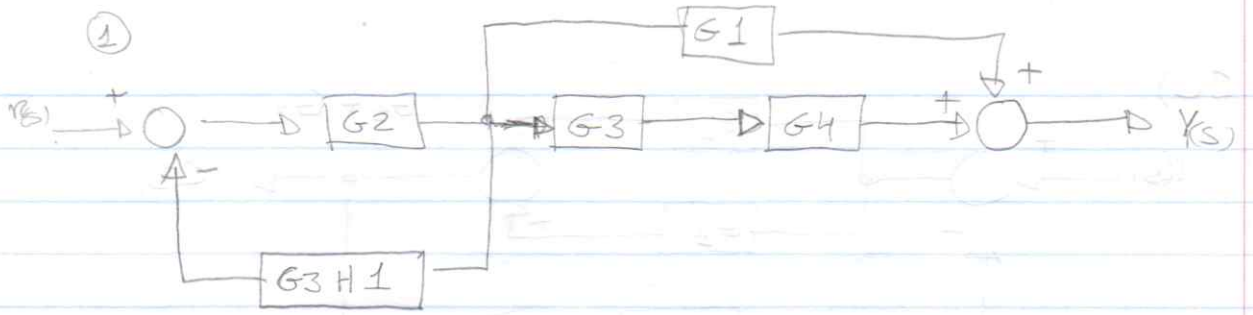
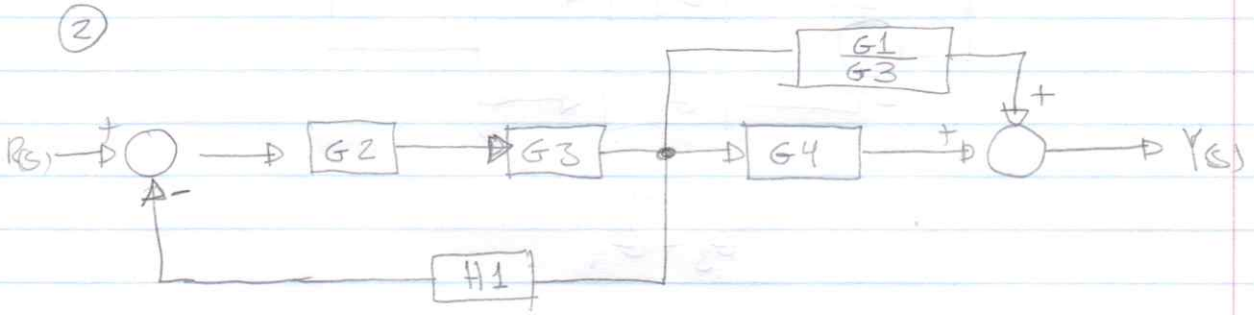
①



②



① $\dfrac{G2}{1+G2G3H1} \times [G1 + (G3G4)] = \dfrac{Y(s)}{R(s)}$

$$\frac{G1G2 + G2G3G4}{(1+G2G3H1)} = \frac{G2(G1+G3G4)}{1+G2G3H1} = \frac{Y(s)}{R(s)}$$

② $\dfrac{G2G3}{1+G2G3H1} \times \left[\dfrac{G1}{G3} + G4\right] = \dfrac{Y(s)}{R(s)}$

$$\frac{G1G2\cancel{G3}}{\cancel{G3}(1+G2G3H1)} + \frac{G2G3G4}{(1+G2G3H1)} = \frac{G1G2 + G2G3G4}{(1+G2G3H1)}$$

$$= \frac{G2(G1+G3G4)}{(1+G2G3H1)}$$