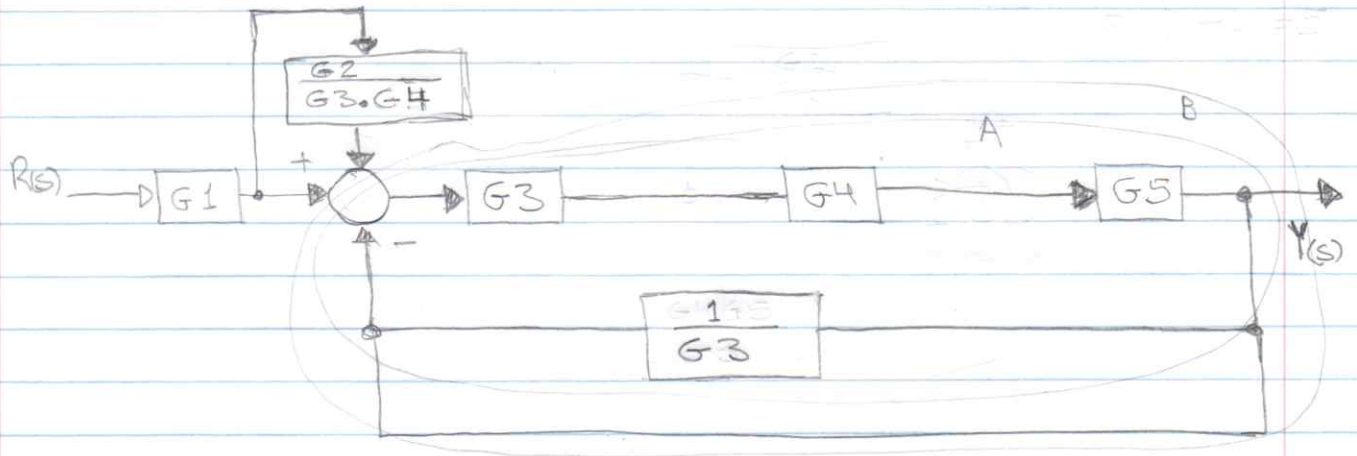
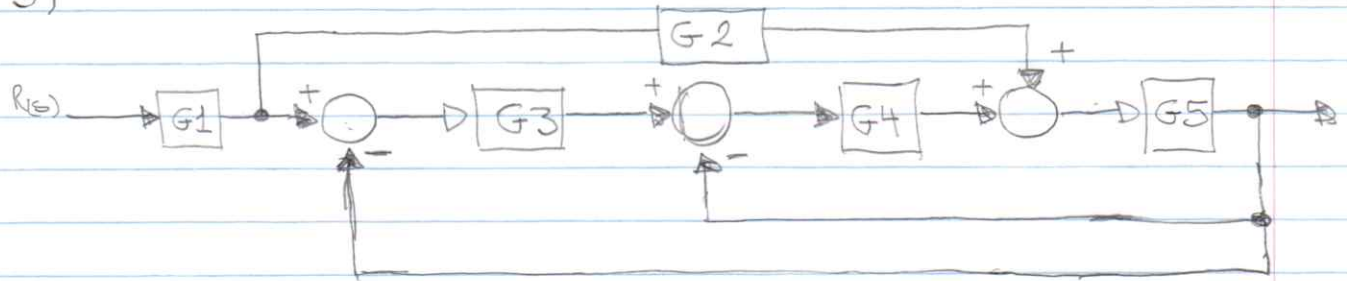


2.5)



$$A: \frac{G3 G4 G5}{1 + G4 G5}$$

4 closed loop
4 equations.

$$B: \frac{\frac{G3 G4 G5}{1 + G4 G5} \times \frac{1}{A}}{1 + \frac{G3 G4 G5}{1 + G4 G5} \times \frac{1}{A}} = \frac{1}{\frac{1 + G4 G5}{G3 G4 G5} + 1}$$

$$C: G1 \times \left[\frac{G2}{G3 \cdot G4} + 1 \right] \times \frac{1}{\frac{1 + G4 G5}{G3 G4 G5} + 1}$$

$$\left[\frac{G1 \cdot G2}{G3 \cdot G4} + G1 \right] \times \frac{1}{\frac{1 + G4 G5}{G3 G4 G5} + 1}$$

$$\begin{aligned} c.o) \quad \frac{1}{\frac{1 + G4 G5}{G3 G4 G5} + \frac{G3 G4 G5}{G3 G4 G5}} &= \frac{1}{\frac{1 + G4 G5 + G3 G4 G5}{G3 G4 G5}} \\ &= \frac{G3 G4 G5}{1 + G4 G5 + G3 G4 G5} \end{aligned}$$

$$\begin{aligned} c.o) \quad \frac{G1 G2}{G3 G4} + \frac{G1 G3 G4}{G3 G4} \\ &= \frac{G1 G2 + G1 G3 G4}{G3 G4} \end{aligned}$$

$$C: \frac{(G1 G2 + G1 G3 G4) \times G3 G4 G5}{G3 G4 \times (1 + G4 G5 + G3 G4 G5)}$$