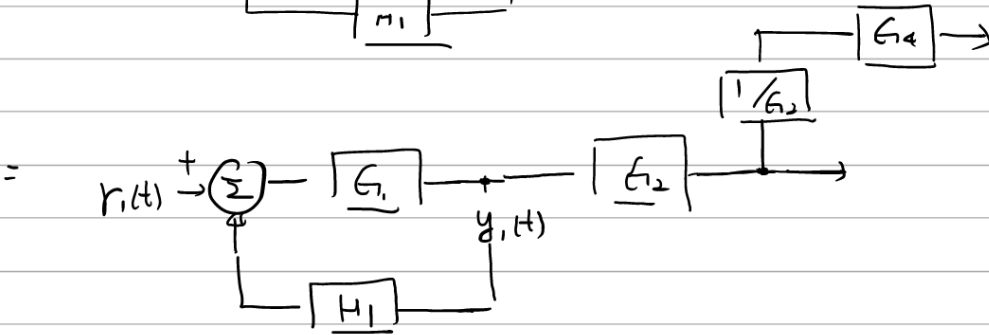
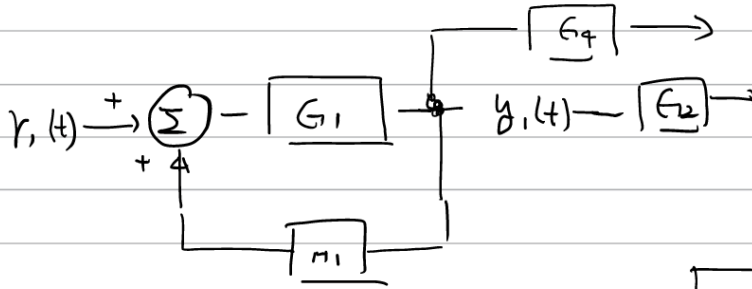
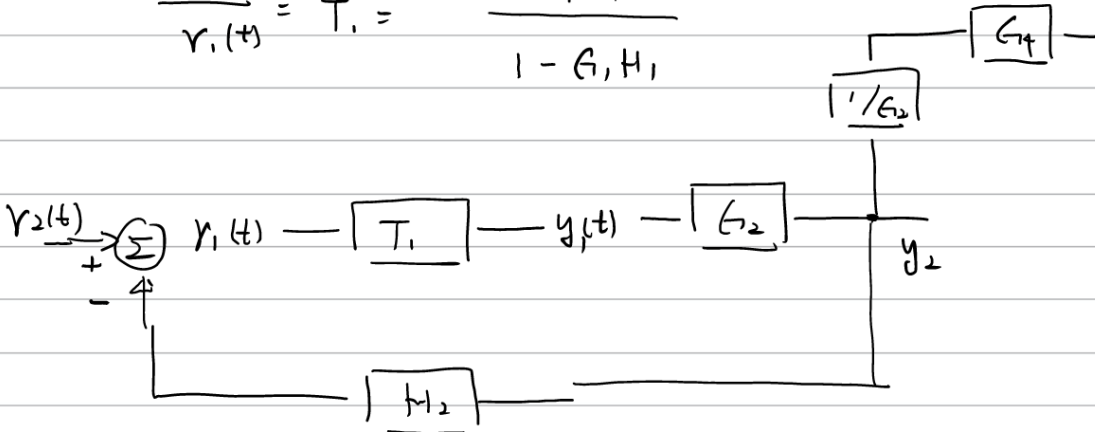


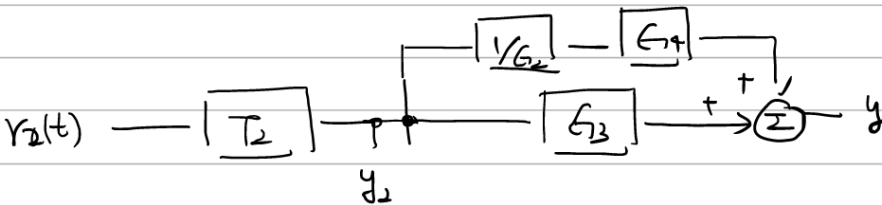
문제: 전달함수 찾기.



$$\frac{y_1(t)}{r_1(t)} = T_1 = \frac{G_1 H_1}{1 - G_1 H_1}$$



$$\frac{y_2}{r_2} = \frac{T_1 G_2}{1 + T_1 G_2 H_2} = T_2$$



$$y = y_2 \left(\frac{1}{G_2} \times G_4 + G_3 \right) = \frac{G_4 + G_3 G_2}{G_2} y_2$$

$$y = r_2 = r \quad y_2 = y$$

$$\frac{y}{r} = \frac{G + G_3 G_2}{G_2} y_2 / r$$

$$= \frac{G_4 + G_3 G_3}{G_2} \frac{T_1 G_2}{1 + T_1 G_2 H_2}$$

$$= \frac{G_4 + G_3 G_3}{G_2} \frac{C_{12} \frac{G_1 H_1}{1 - G_1 H_1}}{1 + \frac{G_1 H_1}{1 - G_1 H_1} G_2 H_2} = \bigcirc \frac{\frac{G_1 G_2 H_1}{1 - G_1 H_1}}{\frac{1 - G_1 H_1 + G_1 H_1 G_2 H_2}{1 - G_1 H_1}}$$

$$= \bigcirc \frac{G_1 G_2 H_1}{1 - G_1 H_1 + G_1 H_1 G_2 H_2}$$

$$= \frac{G_4 + G_3 G_3}{G_2} \frac{G_1 H_1}{1 - G_1 H_1 + G_1 H_1 G_2 H_2} = \frac{G_1 H_1 (G_4 + G_3 G_3)}{1 - G_1 H_1 + G_1 H_1 G_2 H_2}$$