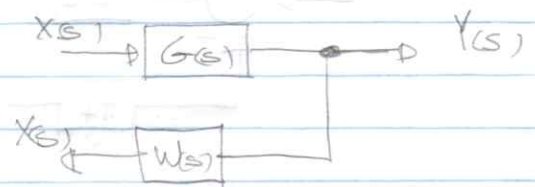


1. b)

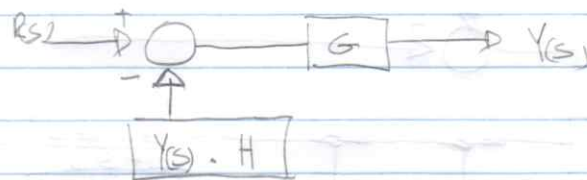
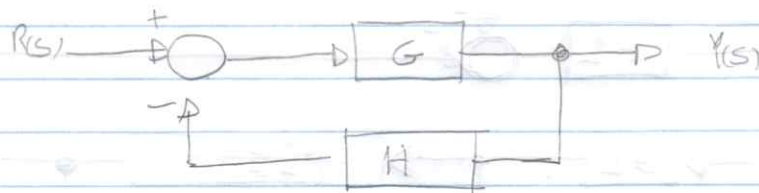


$$X(s) = X(s)$$

$$X(s) = X(s) G(s) \cdot W(s)$$

$$W(s) = \frac{X(s)}{X(s) G(s)} = \frac{1}{G(s)}$$

2. a)



$$(R(s) - Y(s) H) G = Y(s)$$

$$R(s) - Y(s) H G = Y(s)$$

$$G R(s) = Y(s) + Y(s) H G$$

$$G R(s) = Y(s) (1 + H G)$$

$$\frac{Y(s)}{R(s)} = \frac{G}{(1 + H G)}$$