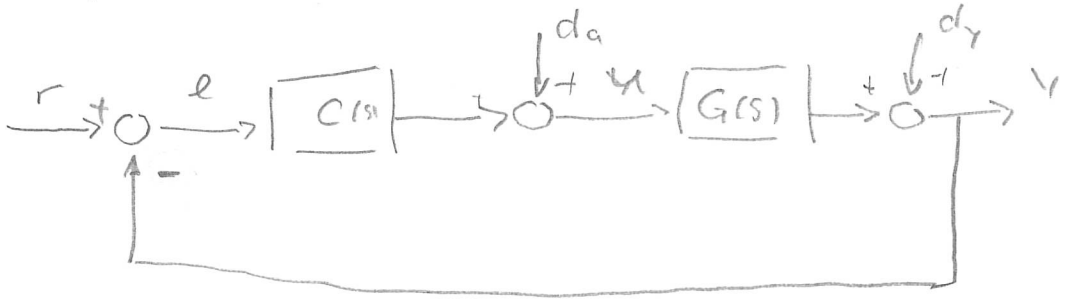
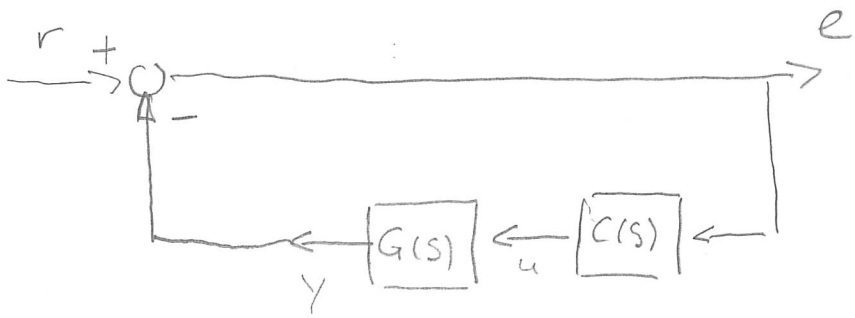
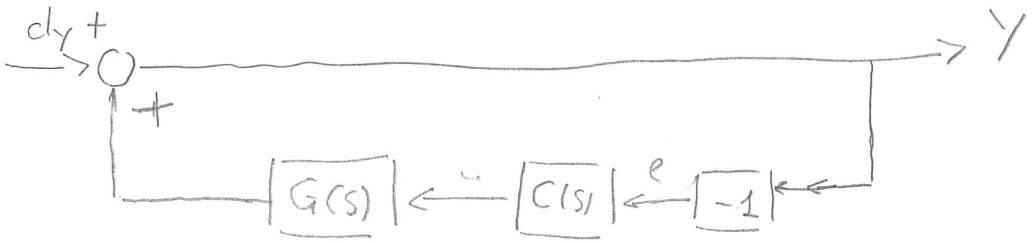
Examples - AC_L10



$$L(s) = G(s)C(s)$$

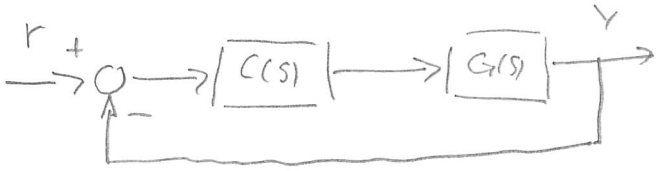


$$\frac{e(s)}{r(s)} = S(s) = \frac{1}{1 + 1 \cdot G(s)C(s)} = \frac{1}{1 + L(s)}$$

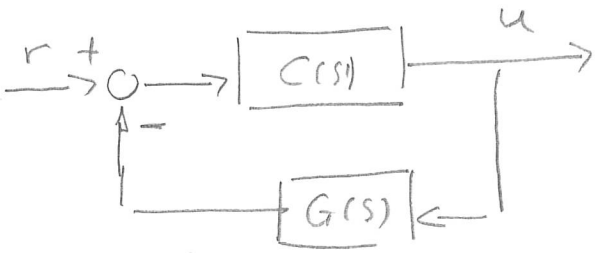


$$\frac{y(s)}{d_y(s)} = S(s) = \frac{1}{1 - 1 \cdot (-1)\, C(s)G(s)} =$$

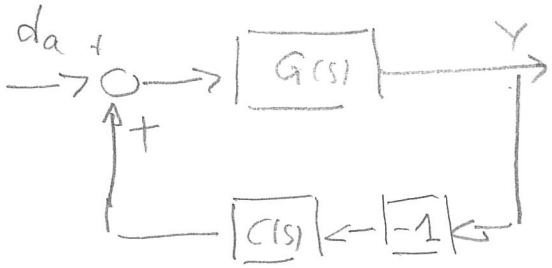
$$= \frac{1}{1 + C(s)G(s)} = \frac{1}{1 + L(s)}$$



$$\frac{Y(s)}{r(s)} = T(s) = \frac{C(s)\,G(s)}{1 + C(s)\,G(s)\cdot 1} = \frac{L(s)}{1+L(s)}$$



$$\frac{u(s)}{r(s)} = R(s) = \frac{C(s)}{1 + \underbrace{C(s)\,G(s)}_{L(s)}} = \frac{C(s)}{1+L(s)}$$



$$\frac{Y(s)}{d_a(s)} = \frac{G(s)}{1 - G(s)(-1)C(s)} = \frac{G(s)}{1+L(s)} = G(s)$$