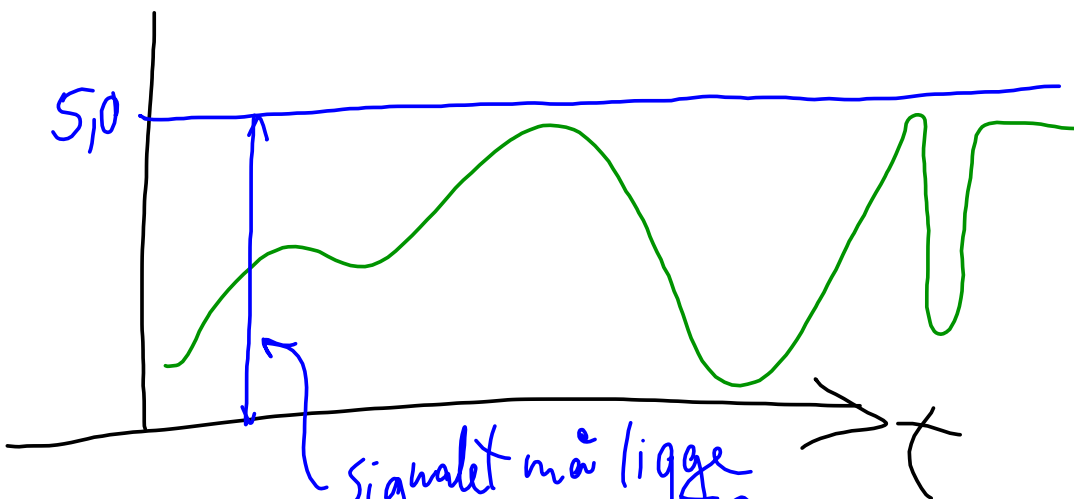
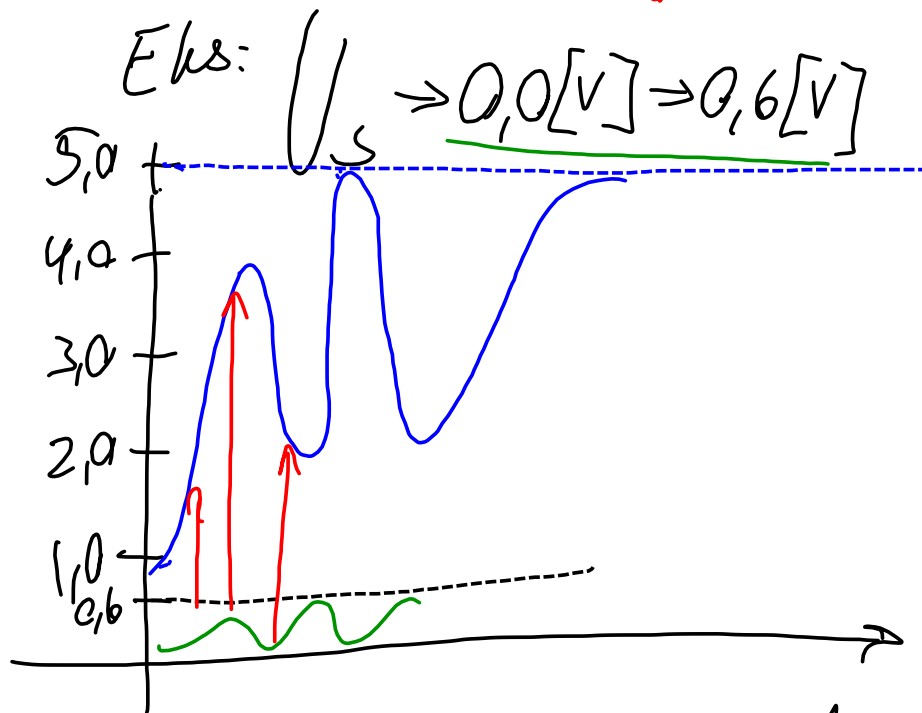
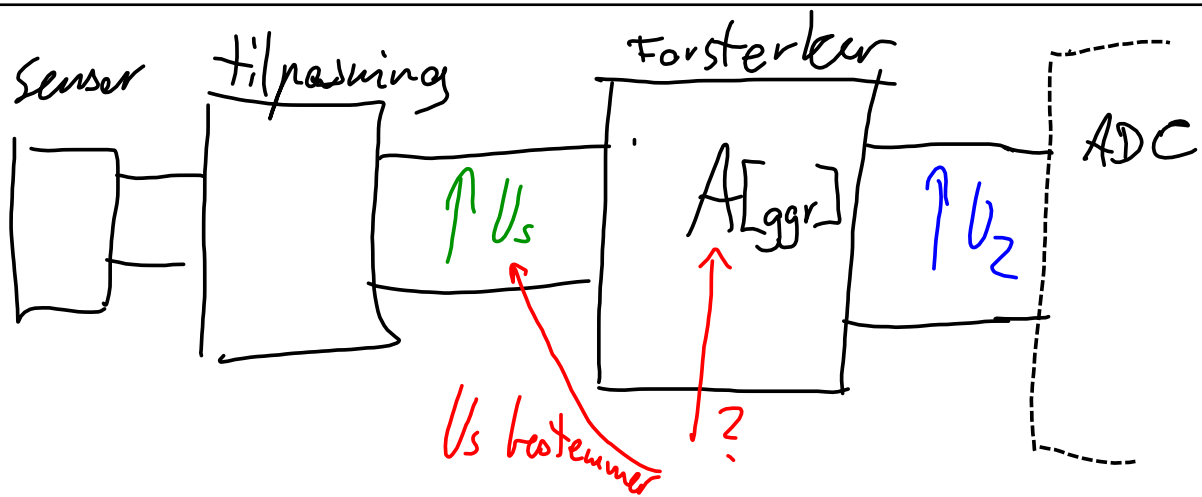


ADC'en krever at ^(den analoge) spenningene inn,
 U_2 ligger mellom to spenninger:

$$F. eks: 0,0 [V] - 5,0 [V]$$



Signalet må ligge
 mellom 0,0 og 5,0
 → da blir signalet konvertert
 til "riktig" digital verdi!



Må finne forsterkningen A :

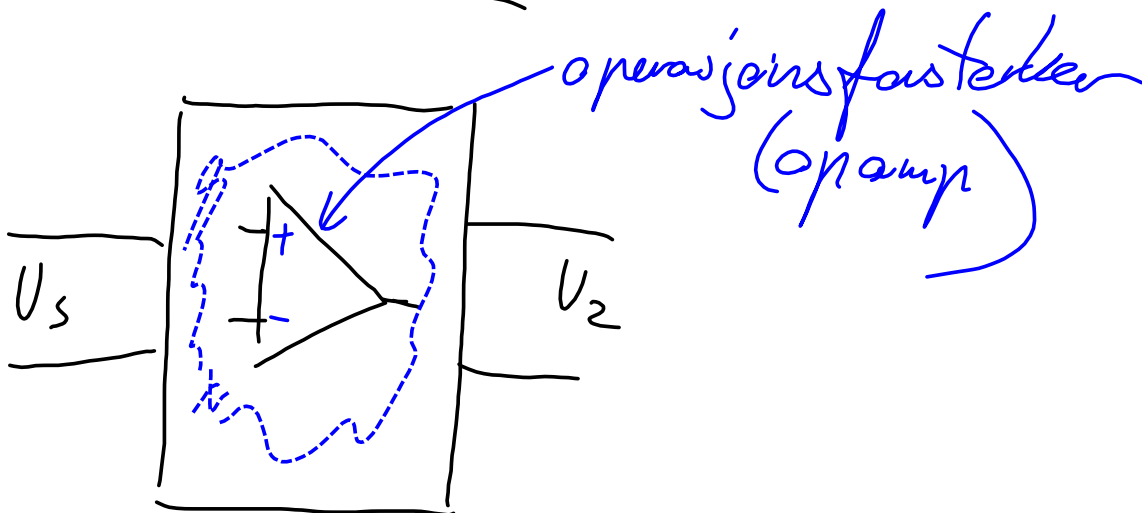
$$U_s = 0,0 \Rightarrow 0,6 [\text{V}]$$

$$U_2 = 0,0 \Rightarrow 5,0 [\text{V}]$$

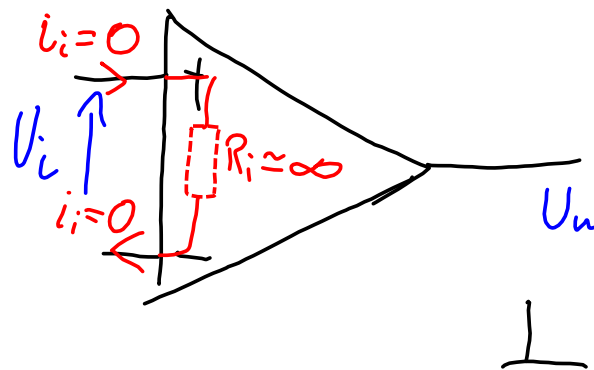
$$U_s \cdot A = U_2$$

$$A = \frac{U_2}{U_s} = \frac{5,0}{0,6} = 8,3 [\text{ggr}]$$

Forsterker

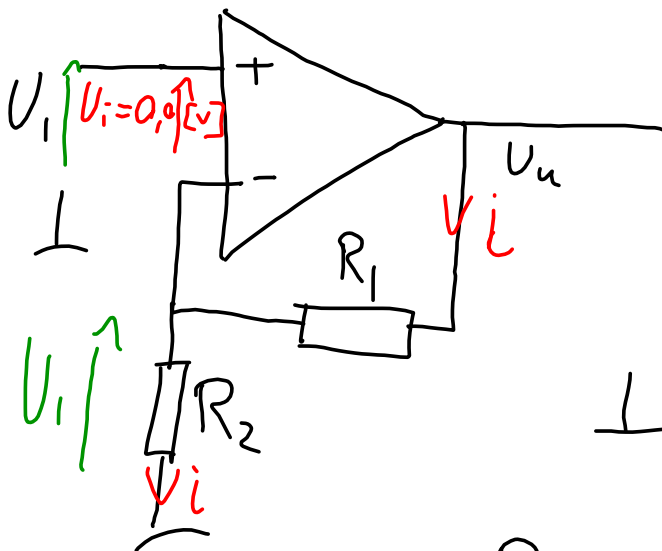


Opamp



$$\frac{U_u}{U_i} = \infty$$

ikke invertierende forsterker



$$U_1 = i \cdot R_2 = \frac{U_u}{R_1 + R_2} \cdot R_2$$

$$i = \frac{U_u}{R_1 + R_2} \rightarrow$$

$$\frac{U_u}{U_1} = \frac{R_1 + R_2}{R_2} = \frac{R_1}{R_2} + \frac{R_2}{R_2} = 1 + \frac{R_1}{R_2}$$