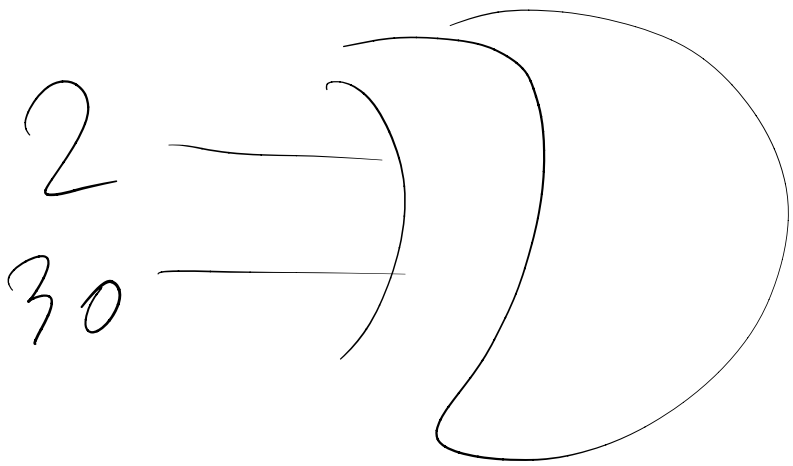
$$f_0\,[Hz] = 2960$$



en undersøkelse av

PMOD1 og PMOD3

8.4ms ved $n = 16$

$$t_{CLK} = \frac{25\ MHz}{2^{16}} = \frac{25 \cdot 10^6}{2^{16}} = 381,469:$$

$$T_{CLK} = \frac{1}{t_{CLK}} = 0,00262144$$

Vi har 32 flipp flopper
og vi har antall Flipp flopar (n_{FF})

$$n_{FF} \cdot T_{CLK} = 0,00262144032$$

$$\approx 0,08388608\ s \approx 8,389\ ms$$

Betyr at målt er vi på $8,4 - 8,389 = 0,011$ feil

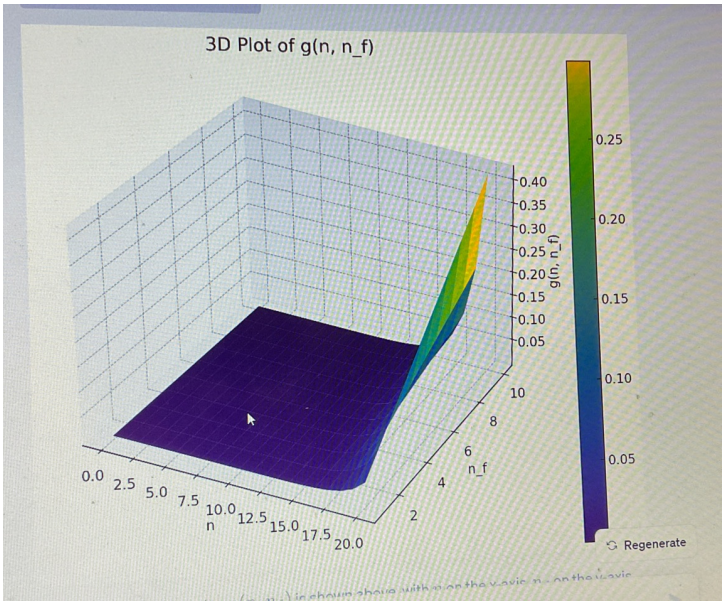
Vi kan finne offseten for vilkårlig n ved

$$(T_{CLK})^{-1} = t_{CLK} = \frac{t_{Fpga}}{2^n}$$

$$n_{FF} \cdot T_{CLK} = t_{offset} = n_{FF} \cdot \frac{1}{t_{CLK}} = n_{FF} \frac{2^n}{t_{FPGA}} = t_{offset}$$

$$n_F \frac{2^n}{25\ MHz} = t \qquad n=16,\ n_F=32 \quad t = \frac{32 \cdot 2^{16}}{25 \cdot 10^6} = 0,08388608$$

Plot of $g(n, n_f) = n_f\left(\frac{2^n}{25 \cdot 10^6 Hz}\right)$



$g(n, 32)$

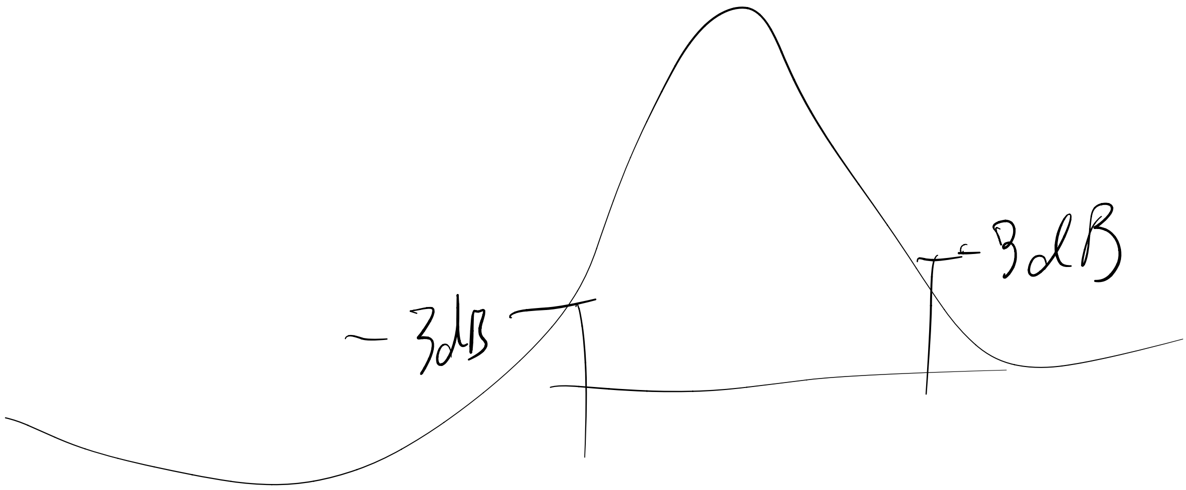
$g(20, n_f)$

$g(20, 32) \approx 1,34217728$

$g(6, 32) \approx 0,08388608$

$g(13, 32) \approx 0,00008192$

Det E widler Signalet ser Brae at i Skopet.



Tabell med tabs

Figur

Problembeskrivelse $s(t)$ och $y(t)$

Kretsschema - topologi

Kretsvärde Hage och lowe frekvens

32-Bits realisering ICE-Studio Screenshot

Spektrum av stöj

Bodeplot

Fina Bandbredd och sänk frekvens

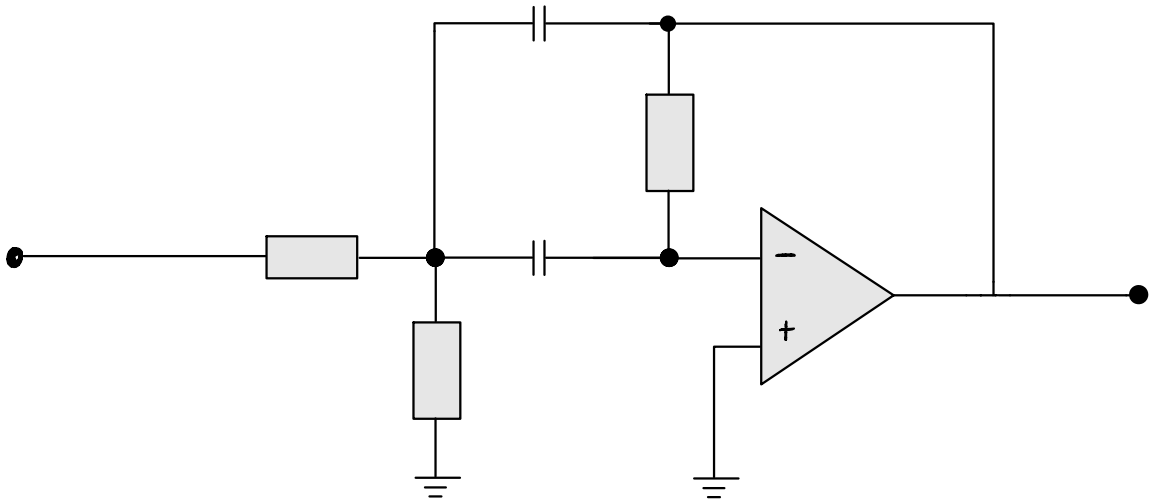
↳ 6,1357dB ↳ ca 2981 Hz

Spektrum av tone interpolera

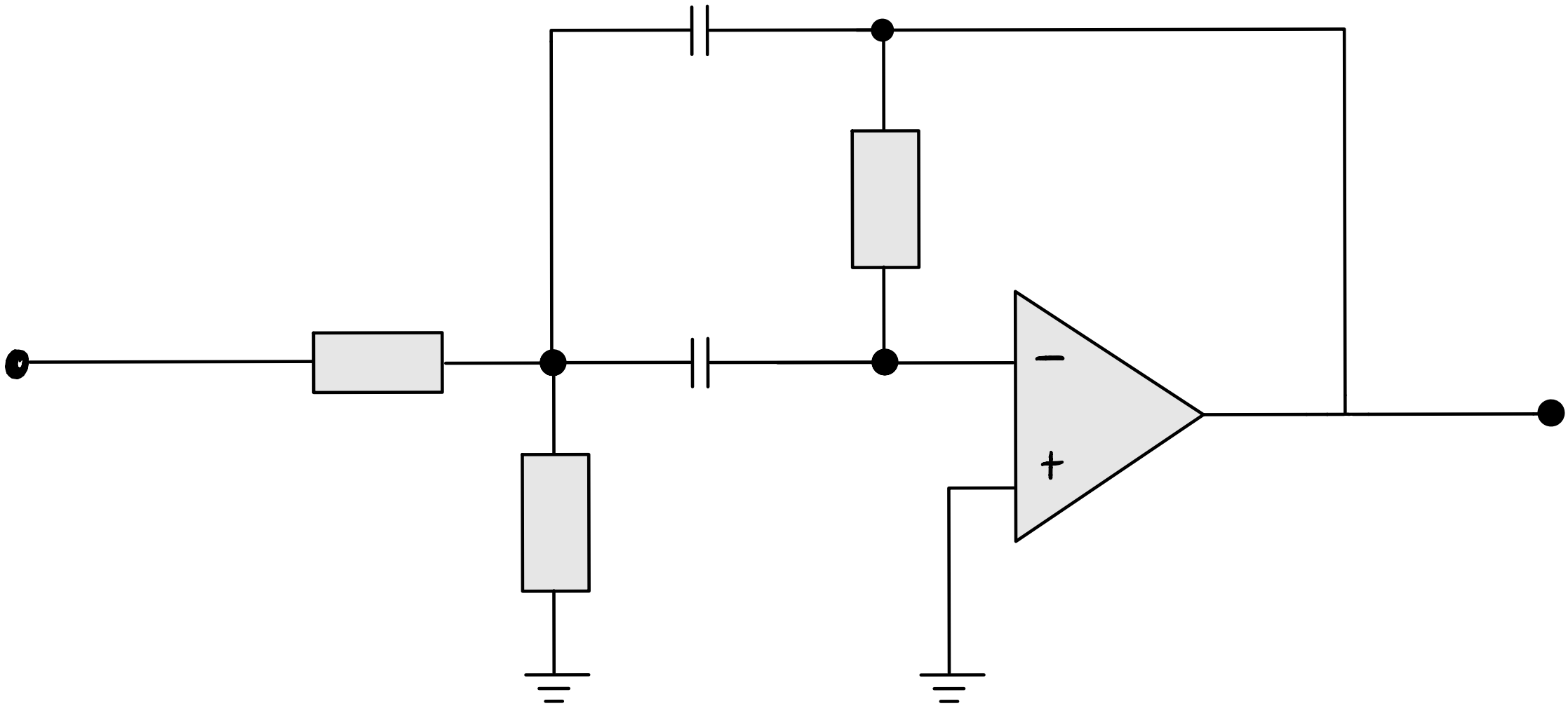
↳ 2918 Hz

3045 Hz

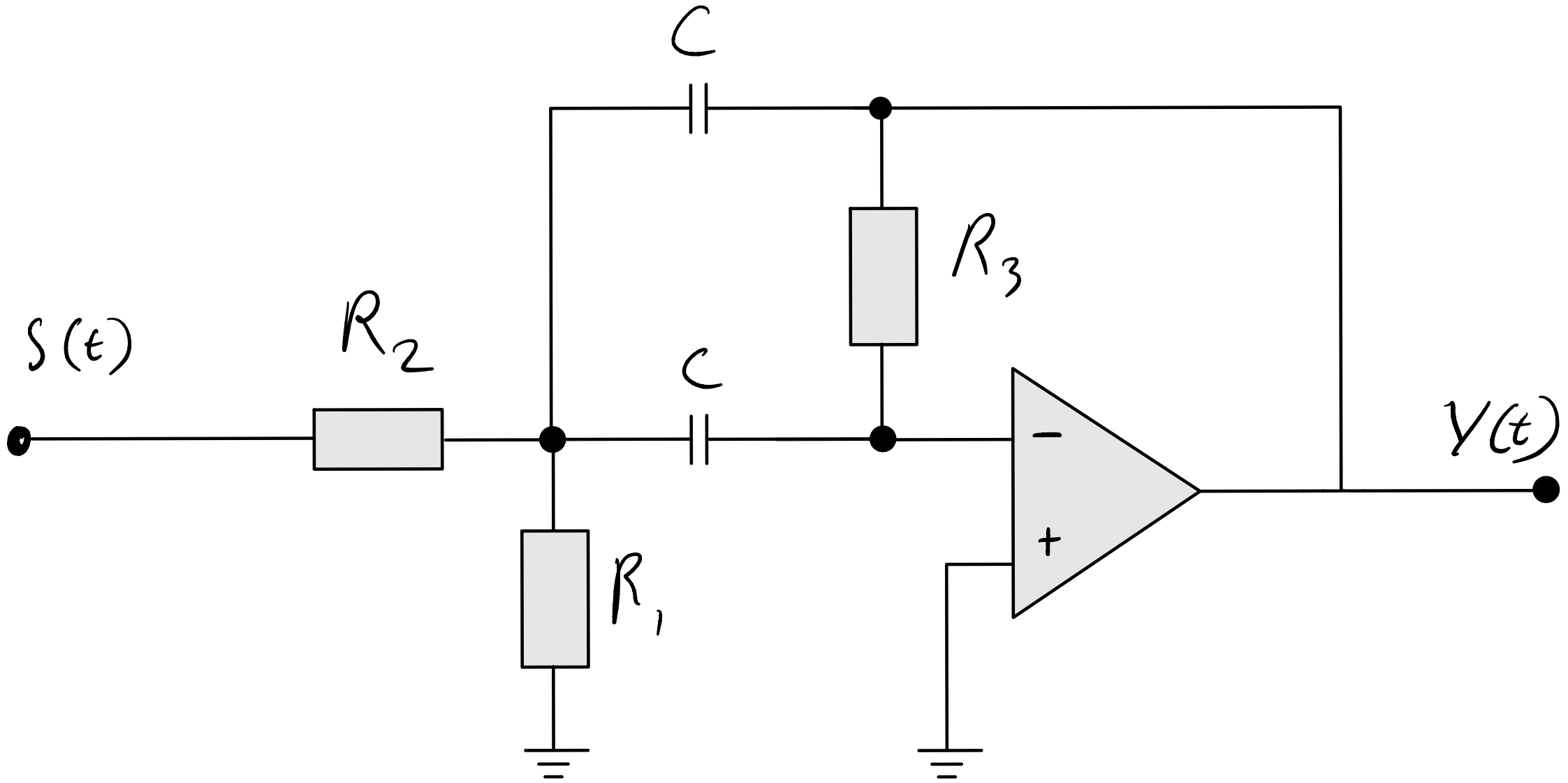
$B \approx 130$



Fullsize no name

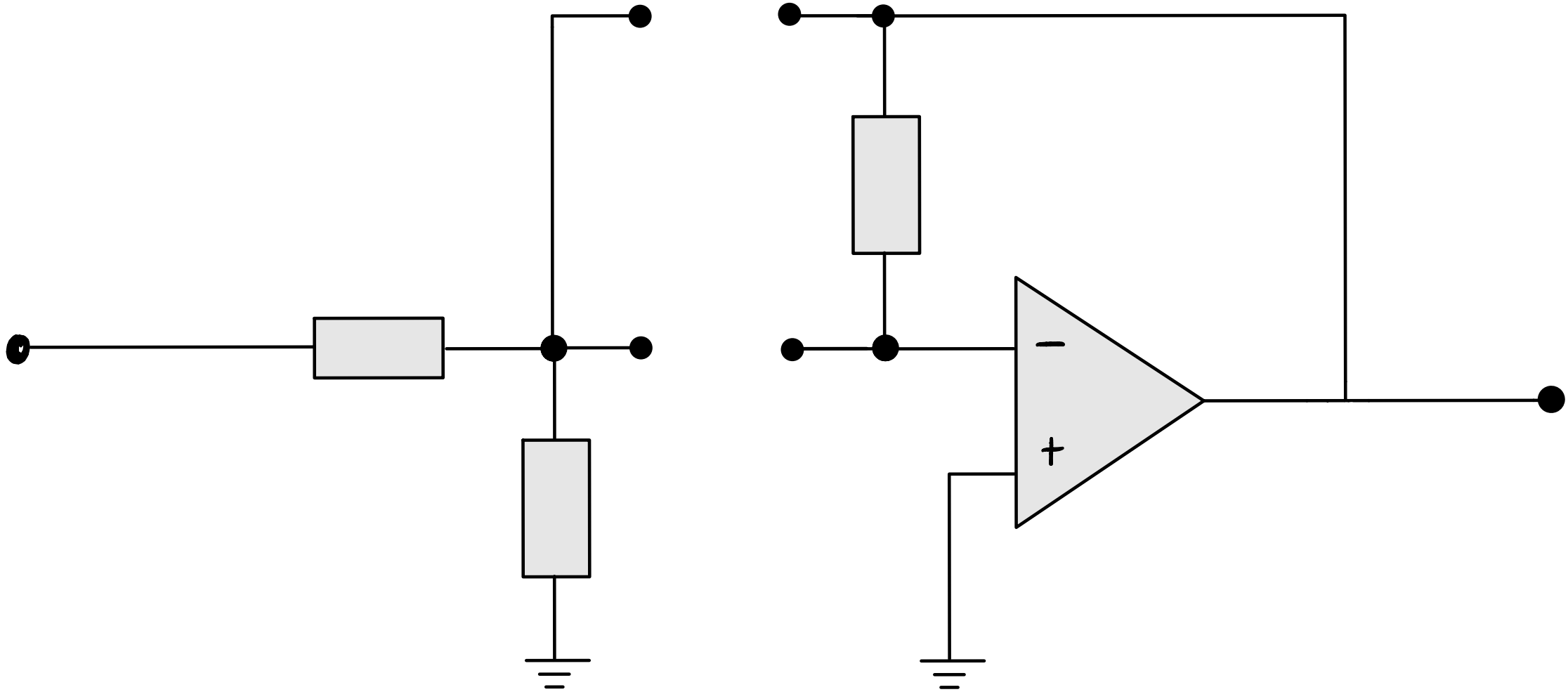


mcd nacn o



Problem Beschreibung Done

Lave frekvens



Høye frekvenser