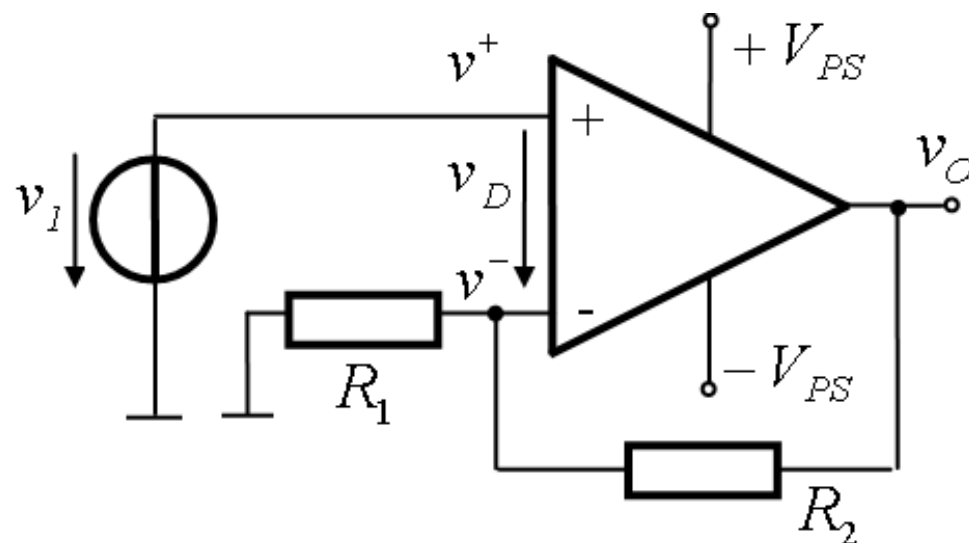


## Homework 6 – Amplifiers with OpAmp



$$R_1 = 5 \text{ k}\Omega, R_2 = 10 \text{ k}\Omega, V_{PS} = \pm 12 \text{ V.}$$

- Compute the parameters of the amplifier,  $R_i$ ,  $R_o$ ,  $A_v$ .
- Deduce and plot VTC  $v_O(v_I)$ . What is the range of values for  $v_I$  for which the amplifier works in the active region?
- Plot  $v_I(t)$  and  $v_O(t)$  for  $v_I(t) = 5\sin 1000t$  [V].
- Modify the circuit so that  $A_v$  is adjustable within [2; 4].