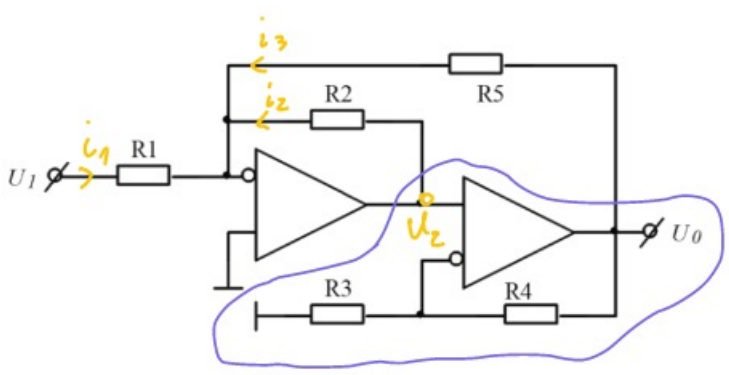
HW7 Khaetskaya Daria

Status	ready
checkbox	☑
class	Electronics
due date	@November 18, 2021



$$i_1 = i_3 + i_2$$

$$\frac{U_1 - 0}{R_1} = \frac{0 - U_2}{R_2} + \frac{0 - U_0}{R_5}$$

Инвер. тригер Шмидта ⇒

$$\Rightarrow U_2 = U_0 \frac{R_3}{R_3 + R_4}$$

$$\frac{U_1}{R_1} = -\frac{U_0 R_3}{R_2(R_3+R_4)} - \frac{U_0}{R_5} = \frac{-U_0 R_3 R_5 - U_0 R_2(R_3+R_4)}{R_5 R_2 (R_3+R_4)} =$$

$$= -U_0 \frac{R_3 \cdot R_5 + R_2(R_3+R_4)}{R_5 R_2 (R_3+R_4)}$$

$$K_u = \frac{U_0}{U_1} = -\frac{R_5 R_2 (R_3+R_4)}{R_1 (R_3 R_5 + R_2(R_3+R_4))}$$