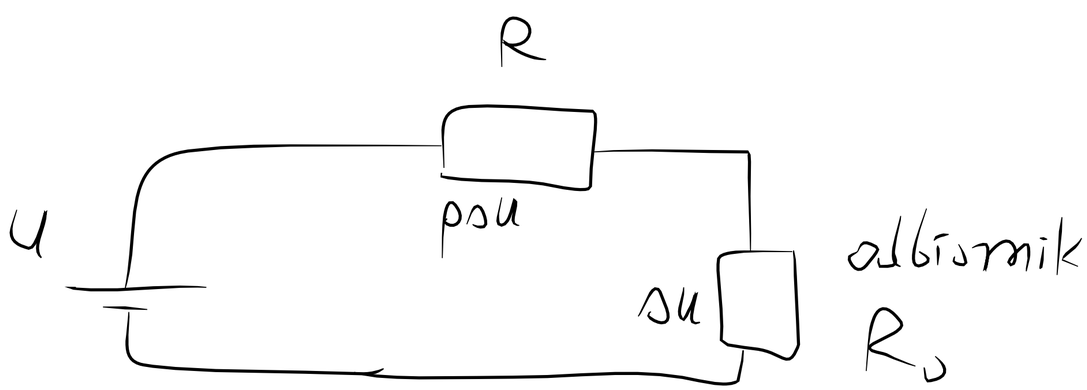

$$P_0 = \Delta U^2 R_0 = \frac{100}{121}\Delta U^2 R_0 = \frac{100}{121}\Delta U_x^2 R_x$$

$$\Delta U_x = \Delta U \sqrt{\frac{R_0}{R_x}}$$

$$\rho' = \frac{1}{100}\rho$$

$$\rho_x^2 \Delta U_x^2 R_x = \frac{1}{100} R_0 \rho^2 \Delta U^2$$

$$\frac{R^2}{R_x^2} \cancel{\Delta U^2} \cancel{\frac{R_0}{R_x} R_x} = \frac{1}{100} \cancel{R_0} \cancel{\Delta U^2} \frac{1}{100}$$

$$\frac{R^2}{R_x^2} = \frac{1}{100^2}$$

$$R_x = 100R = 10R_0$$

$$(\rho + 1)\Delta U = U$$

$$1{,}1\,\Delta U = U$$

$$I = \frac{\rho \Delta U}{R} = \frac{\Delta U}{R_0} = \frac{U}{R + R_0}$$

$$0{,}1R_0 = R \qquad \frac{R_0}{R} = \frac{1}{10}$$

$$(\rho_x + 1)\Delta U_x = U_x$$

$$I_x = \frac{\rho_x \Delta U_x}{R} = \frac{\Delta U_x}{R_x} = \frac{U_x}{R + R_x}$$

$$\rho_x = \frac{R}{R_x} \qquad \Delta U_x = \frac{R_x}{R + R_x} U_x$$

$$\Delta U_x = \Delta U \frac{1}{10} \sqrt{\frac{R_0}{R}} = \Delta U \frac{1}{10} \frac{1}{\sqrt{10}} = U \frac{1}{1{,}1} \frac{1}{10} \frac{1}{\sqrt{10}} = U \frac{1}{11\sqrt{10}}$$