

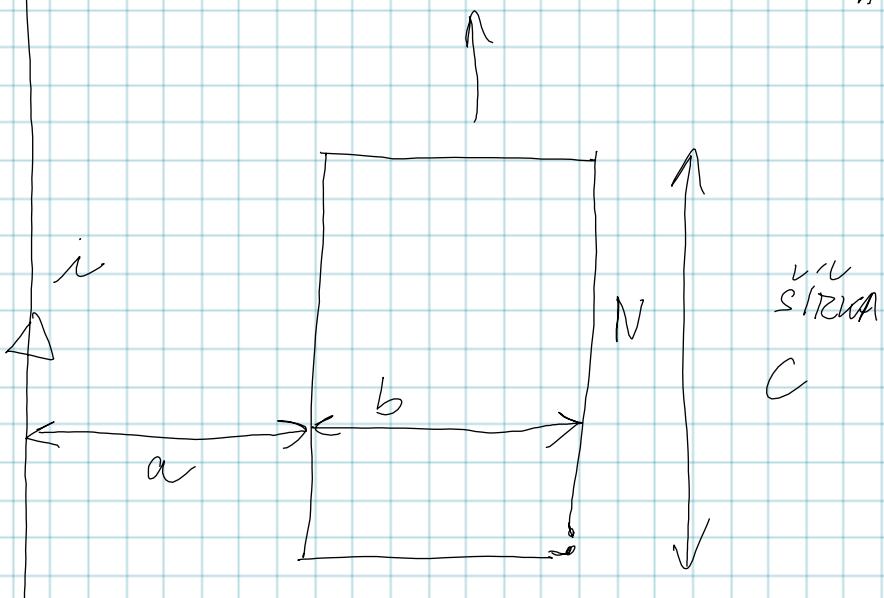
$$M_{12} = \frac{\phi_{12}}{l_1}$$



$$H = \frac{I}{2\pi r}$$

$$\Phi = \int_S \vec{B} \cdot d\vec{s} = c \int_a^{a+b} \frac{I \ln r}{2\pi r} dr =$$

$$= \frac{I \ln c}{2\pi r} \ln \frac{b \ln c}{a}$$



$M \rightarrow$

$$M = \frac{\mu_0 c \ln(\frac{b+a}{a}) N}{2\pi}$$