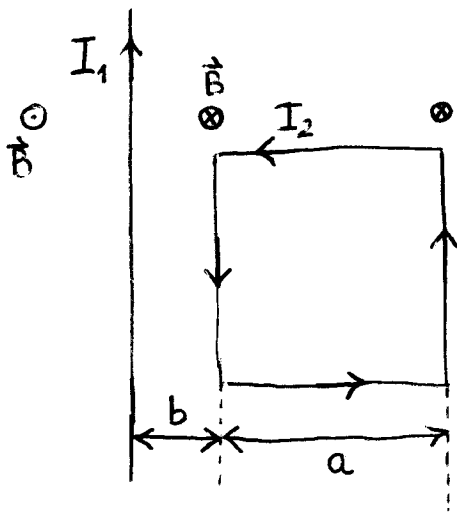


4.)

$$I_1 = 30 \text{ A} \quad I_2 = 10 \text{ A} \quad \vec{F} = ? \quad a = 2 \text{ cm} \quad b = 1 \text{ cm}$$

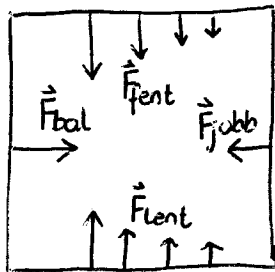


hosszú egyenes vezető:

$$B = \frac{\mu_0 I}{2\pi r}$$

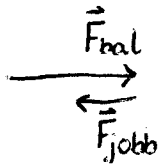
egyenes vezető
merőleges homogén
térben:

$$F = I l B$$



eredő:

$$\vec{F}_e = \vec{F}_{bal} + \vec{F}_{jobb} + \underbrace{\vec{F}_{fent} + \vec{F}_{lent}}_0$$



$\vec{F}_e$

$$\begin{aligned} F_e &= F_{bal} - F_{jobb} = I_2 a B_{bal} - I_2 a B_{jobb} = \\ &= I_2 a (B_{bal} - B_{jobb}) \\ &= I_2 a \left(\frac{\mu_0 I_1}{2\pi b} - \frac{\mu_0 I_1}{2\pi (b+a)} \right) = \dots \end{aligned}$$