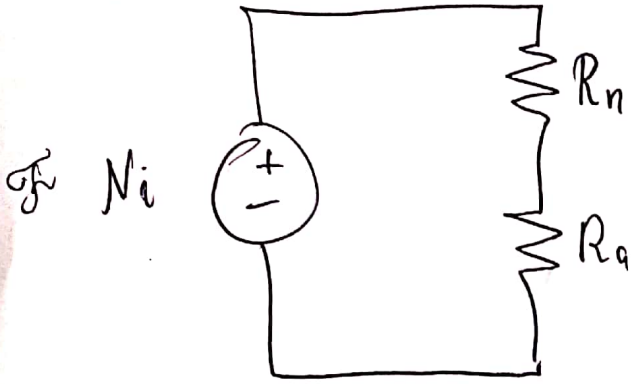
Angie Marchena Mardell



$$R_n = \frac{l_n}{\mu_r \mu_0 A}$$

$$R_n = \frac{2\pi(0,08)}{800 \cdot 4\pi \times 10^{-7} \cdot \pi (0,02)^2}$$

$$R_n = 39788735 \text{ A·vuelta/wb}$$

$$R_a = \frac{l_a}{\mu_0 A_a}$$

$$R_a = \frac{2\pi \cdot 0,03}{4\pi \times 10^{-7} \cdot \pi r^2}$$

$$R_a = 18997721,93 \text{ A·vuelta/wb}$$

$$R_{Total} = R_n + R_a$$

$$\boxed{R_T = 19395609 \text{ A·vuelta/wb}} \quad R/b$$

$$\mathcal{F} = Ni$$

$$\mathcal{F} = 800 \cdot 4A$$

$$\boxed{\mathcal{F} = 3200 \text{ A·vuelta}} \quad R/a$$

$$\phi = \frac{\mathcal{F}}{R_T}$$

$$\phi = \frac{3200}{19395609}$$

$$\boxed{\phi = 1,6 \times 10^{-4}} \quad R/c$$

$$Ni = \mathcal{F} = B \cdot A \cdot R_T$$

$$\Rightarrow \frac{\mathcal{F}}{A \cdot R_T} = B$$

$$\Rightarrow B = \frac{3200}{\pi (0,02)^2 \cdot 19395609}$$

$$\boxed{B = 1,31 \text{ T}} \quad d$$