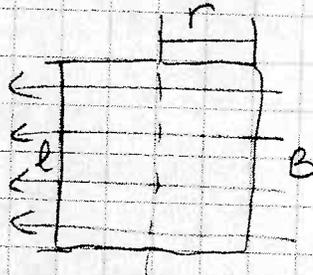


$$\begin{aligned}
 B &= .0065 \text{ T} \\
 I &= .50 \text{ A} \\
 l &= .16 \text{ m} \\
 r &= .08 \text{ m}
 \end{aligned}$$

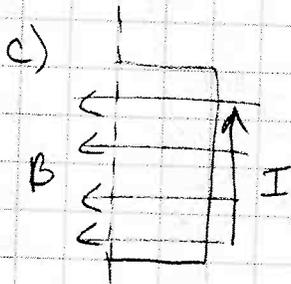


$$\begin{aligned}
 \text{a) } F_B &= B \cdot I \cdot l \\
 &= (.0065 \text{ T})(.50 \text{ A})(.16 \text{ m})
 \end{aligned}$$

$$F_B = 5.2 \times 10^{-4} \text{ N}$$

$$\begin{aligned}
 \text{b) } \tau &= F \cdot r \\
 &= (5.2 \times 10^{-4} \text{ N})(.08 \text{ m}) \cdot (3 \text{ loops})
 \end{aligned}$$

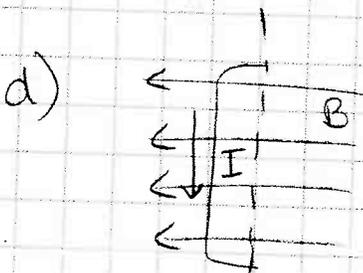
$$\tau = 1.2 \times 10^{-4} \text{ Nm}$$



By RHR #1:

fingers = left
thumb = up

$$F_B = \text{Out } \odot$$



By RHR #1:

fingers = left
thumb = down

$$F_B = \text{in } \times$$