



find current:

$$\text{Loop eqn: } +\varepsilon - IR = 0 \Rightarrow I = \frac{\varepsilon}{R} = 5A$$

$$\vec{F} = I\vec{L} \times \vec{B}$$

NOTE: forces \vec{F}_1 & \vec{F}_3 cancel.

and

$$\vec{F}_2 = I\vec{L} \times \vec{B}$$

$$|\vec{F}_2| = ILB \sin 90^\circ = \underline{0.025 N}$$

RHR $\Rightarrow \vec{F}_2$ is to the right.