5. The force on a wire segment of length $L$ carrying current I and located perpendicular to magnetic field of strength $B$ is

$$
\begin{aligned}
& F=I L B \\
& F=(4.0 \mathrm{~A})(0.30 \mathrm{~m})(0.3 \mathrm{~T}) \\
& F=0.36 \mathrm{~N}
\end{aligned}
$$

