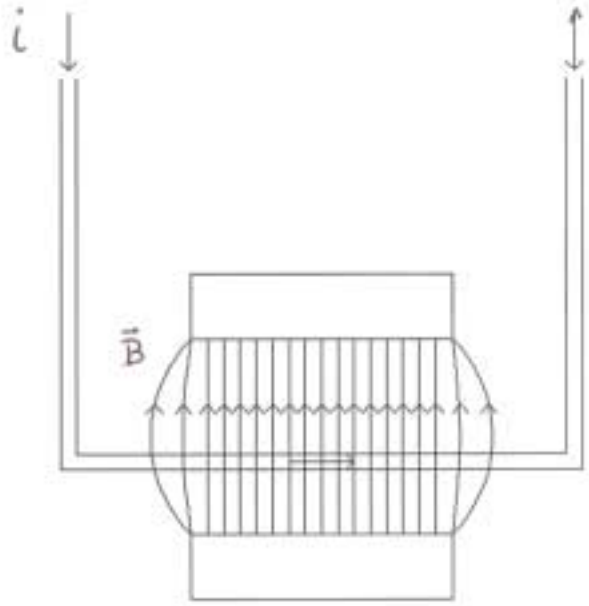
Force on a Current Carrying Wire



Since there is no electric field present,

$$F_{Lorentz} = q(\mathbf{E} + \mathbf{vXB}) = q\mathbf{vXB}.$$

Also, since the velocity of the charges is perpendicular to the B field,

$$F_{Lorentz} = qvB = ilB.$$

Thus, since the charge is negative, the direction of the force is into the page.