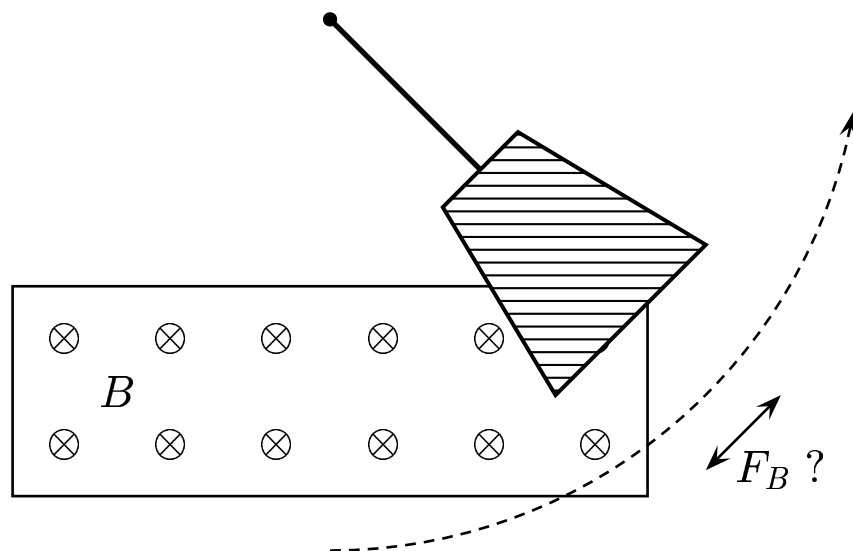



Consider the setup of a damped pendulum. The magnetic field \vec{B} is into the paper.

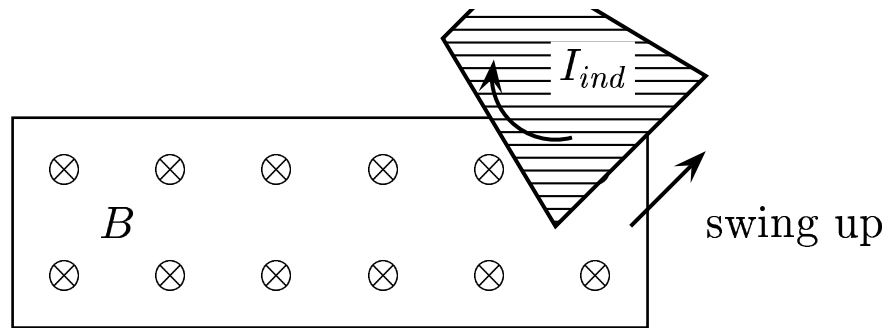


Find the direction of the force due to \vec{B} asserted on the metal plate, as it leaves the region.

A) The direction of F_B is .

B) The direction of F_B is .

As the plate is leaving the rectangular region, \vec{B}_{ind} opposes the flux change in the plate. \vec{B}_{ind} has the same direction as that of \vec{B} , I_{ind} is clockwise, $\vec{F} = I_{ind} \Delta L \times \vec{B}$, which leads to the pulling back force.



Answer **B**.

31.06-01 Damped Pendulum 2004-3-24