Lenz's Rule (2)



In the situation shown below the current induced in the conducting ring generates a magnetic field whose flux counteracts the change in magnetic flux caused by the bar magnet.

- Moving the bar magnet closer to the ring increases the magnetic field \vec{B}_1 (solid field lines) through the ring by the amount $\Delta \vec{B}_1$.
- ullet The resultant change in magnetic flux through the ring induces a current I in the direction shown.
- The induced current I, in turn, generates a magnetic field \vec{B}_2 (dashed field lines) in a direction that opposes the change of flux caused by the moving bar magnet.

