

Faraday's Law:

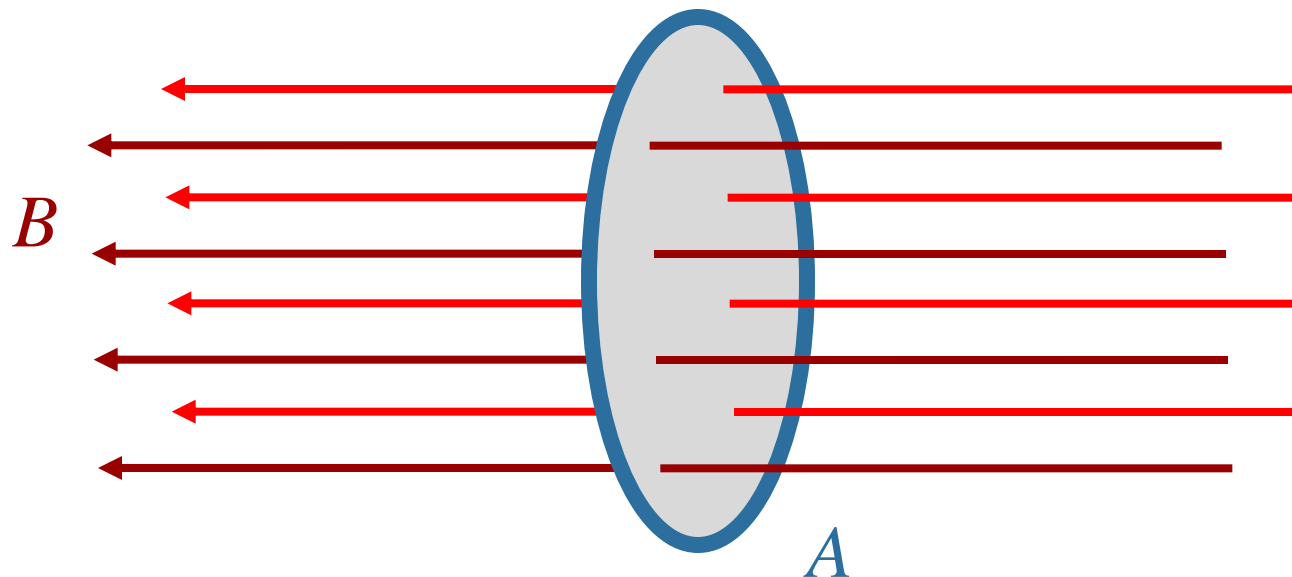
$$emf = \oint \vec{E} \cdot d\vec{\ell} = -\frac{d\Phi_B}{dt}$$

where

$$\Phi_B \equiv \int \vec{B} \cdot d\vec{A}$$

In Practical Words:

1) When the flux Φ_B through a loop changes, an *emf* is induced in the loop.



Show Projection

Think of Φ_B as the number of field lines passing through the surface

There are many ways to change this...