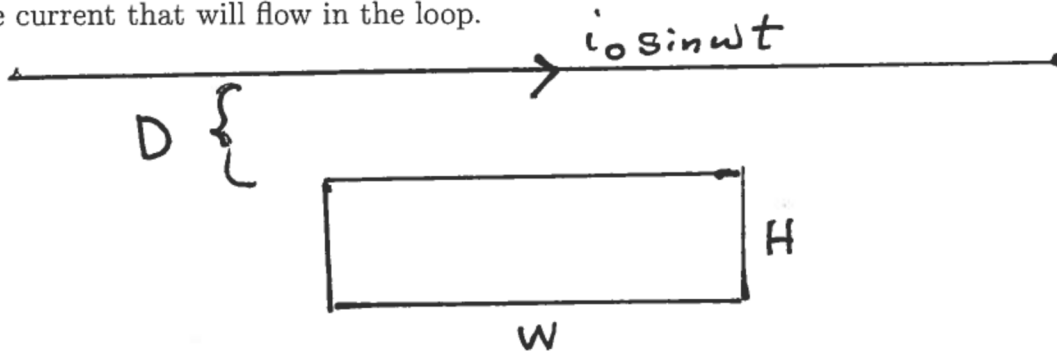


3. (25 points) An infinitely long wire carries a current $i_0 \sin \omega t$ as shown, where i_0 and ω are known. Nearby is a rectangular loop of wire with resistivity ρ which has cross sectional area A and dimensions W and H as shown. Ignoring self inductance find the current that will flow in the loop.



Law

Application

Result