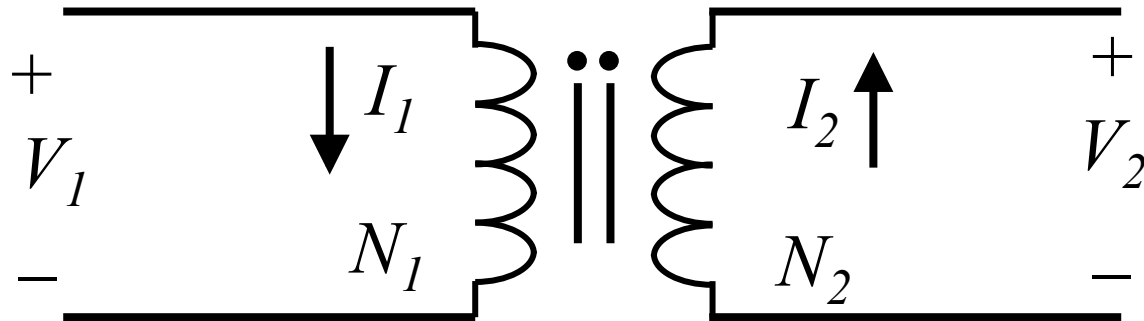
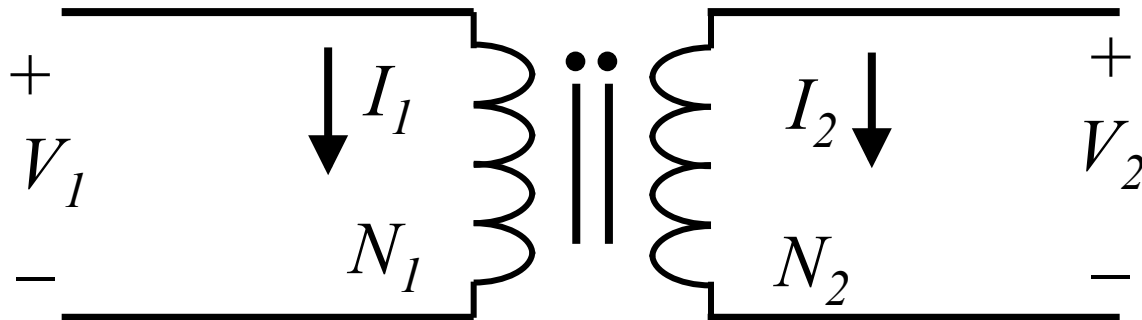


1. Specify the V_2/V_1 and I_2/I_1 in terms of the turns ratio N_1 and N_2 .



2. Specify the V_2/V_1 and I_2/I_1 in terms of the turns ratio N_1 and N_2 .

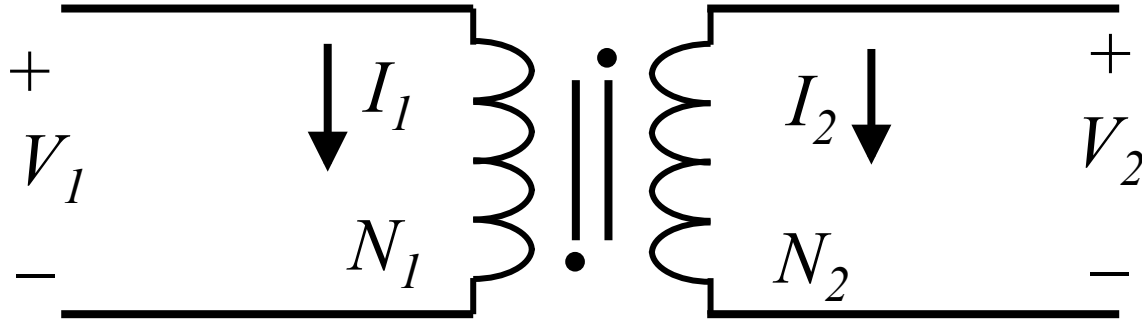


Hint for all problems:
If the current enters the dotted terminal, the reference polarity of the mutual voltage in the second coil is positive at the dotted terminal of the second coil.

Or:
If the current leaves the dotted terminal of one coil, the reference polarity of the mutual voltage in the second coil is negative at the dotted terminal of the second coil.

Polarity is determined by how the coils are physically wound, the right hand rule, and Lenz's Law: an induced electromotive force (emf) always gives rise to a current whose magnetic field opposes the original change in magnetic flux. And magnetic flux is the sum of the normal component of a magnetic field passing through a surface.

3. Specify the V_2/V_1 and I_2/I_1 in terms of the turns ratio N_1 and N_2 .



4. Specify the V_2/V_1 and I_2/I_1 in terms of the turns ratio N_1 and N_2 .

