1. Give the Following Specs find the turns ration needed for maximum power transfer from the Amplifier to the Speaker.

   - Output impedance of the Amp = 300Ω
   - You will be driving an 8Ω Speaker.
   - The output off the Amplifier with be represented with a sinusoid given by is phasor representation 20<0.

2. Calculate the Power Delivered to the load with and without the transformer attached.

3. Simulate results using LTSpice.
   a. Measure the Current through the speaker and voltage across the speaker to calculate the power delivered to the speaker.
   b. Repeat part (a), but remove the transformer.
   c. Verify that maximum power is being transferred to the load when using the transformer.