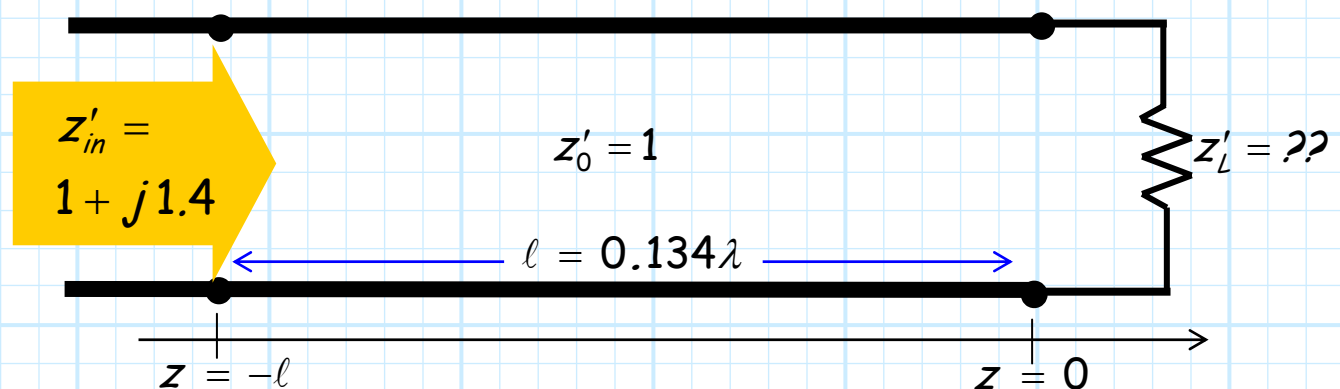


Example: Determining the Load Impedance of a Transmission Line

Say that we know that the **input** impedance of a transmission line length $l = 0.134\lambda$ is:

$$z'_{in} = 1.0 + j1.4$$

Let's determine the impedance of the **load** that is terminating this line.



Locate z'_{in} on the Smith Chart, and then rotate **counter-clockwise** (yes, I said **counter-clockwise**) $2\beta l = 96.5^\circ$.

Essentially, you are removing the phase shift associated with the transmission line. When you stop, lift your pencil and find z'_L !

