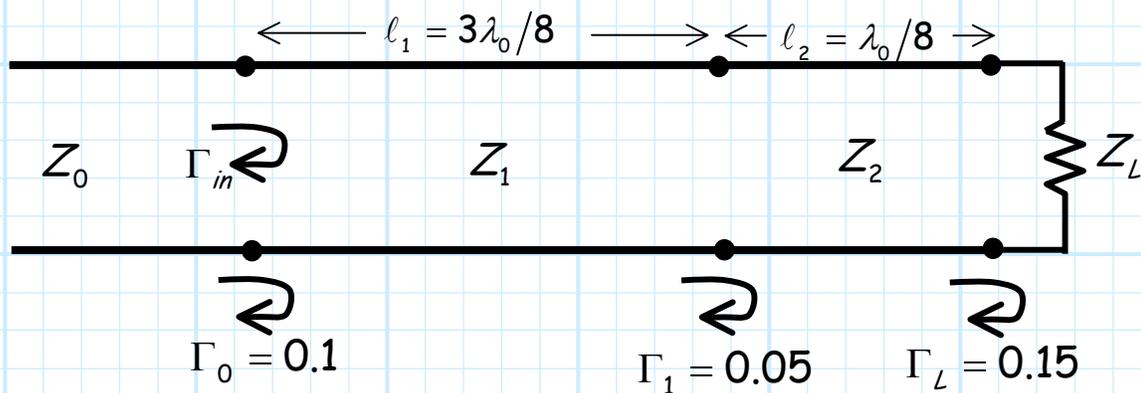


### Special Problem 5.5-1

Use the **theory of small reflections** to determine a **numeric** value for the **input** reflection coefficient  $\Gamma_{in}$ , at the design frequency

$$\omega_0 = v_p / \lambda_0.$$

Assume that the propagation velocity is the same in all transmission lines.



Note that the transmission line sections have **different lengths!**