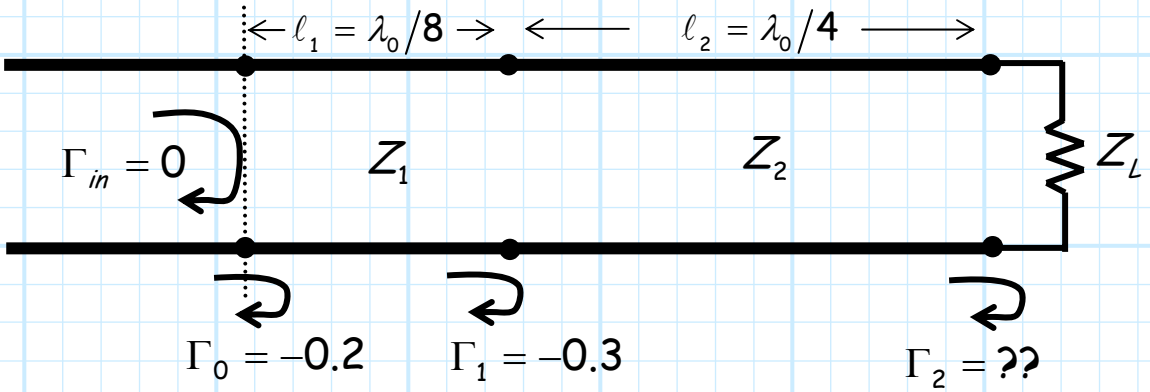
Special Problem 5.5-5

Consider the **multi-section** circuit shown below.

Using the **theory of small reflections,** it is determined that the **input** reflection coefficient at the design frequency $\omega_0 = v_p/\lambda_0$ is $\Gamma_{in} = 0$.

Load Z_L is **complex**.



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

> Given that the first two marginal reflection coefficients are $\Gamma_0 = -0.2$ and $\Gamma_1 = -0.3$, use the theory of small reflections to determine the **value** of **marginal reflection coefficient** Γ_2 (at the design frequency ω_0).