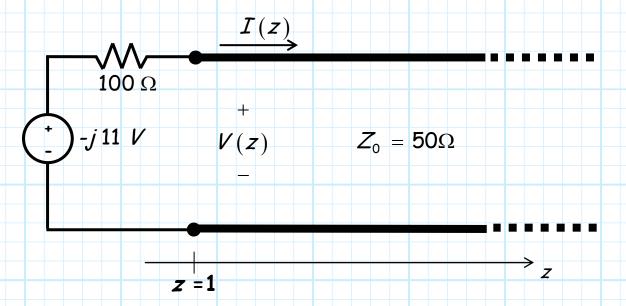
Special Problem 2.6-11

Consider the circuit below:



It is known that the voltage along the transmission line is:

$$V(z) = 3e^{-j\beta z} + Be^{+j\beta z} V$$

where B is some unknown complex value, and $\beta = \frac{\pi}{2}$.

Determine the value of B.