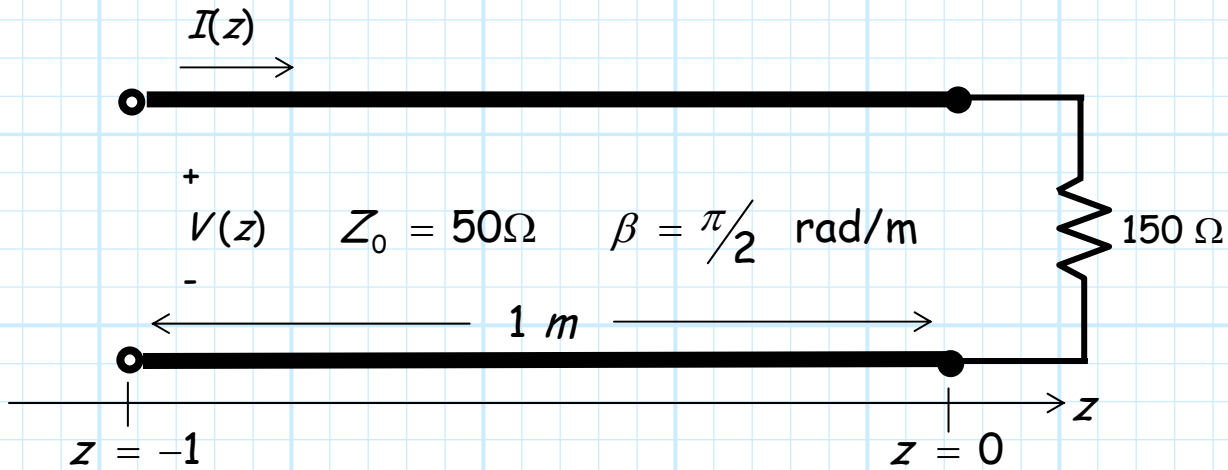


### Special Problem II.A - 37

Consider this terminated, lossless, transmission line :



The voltage at  $z=0$  is known to be  $V(z=0) = j3.0\ \text{V}$ :

Determine:

1. the complex functions  $V^+(z), V^-(z), \Gamma(z)$ .
2. the complex functions  $V(z), I(z), Z(z)$ .
3. the complex values  $V^+(z=-1), V^-(z=-1), \Gamma(z=-1)$ .
4. the complex values  $V(z=-1), I(z=-1), Z(z=-1)$ .