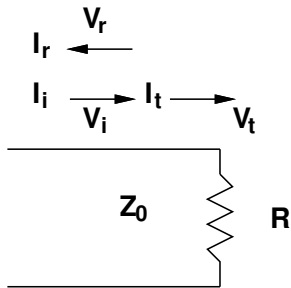


$$w = \frac{1}{\sqrt{LC}} \tag{1}$$

1. Considering the end of a transmission line instantaneously when a pulse arrives:



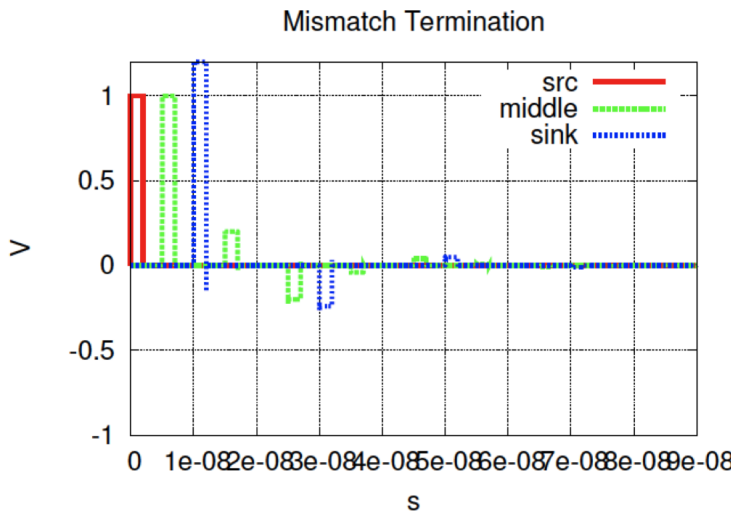
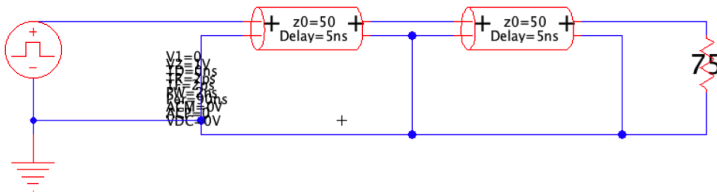
(a) KVL relationship?  KCL relationship?

(b) V=IR relationships:  $V_i = I_i \times Z_0$   $V_r =$    $V_t =$

(c) Express  $V_r$  in terms of  $V_i$ ,  $R$  and  $Z_0$ :  $V_r =$

2. What happens at source end of transmission line?

3. Below we see what happens when a short-circuit source drives a  $50\Omega$  line with a  $75\Omega$  termination.



4. Transmission Line Termination Fill in the table below and match the following transmission line circuits (1-5) with the correct pulse propagation plot (a-d) for sending a pulse down the transmission lines to a resistive load. There is intentionally one less plot than circuit. The effective resistance seen into the source is a short circuit.

		Answer
1)		
2)		
3)		
4)		
5)		

