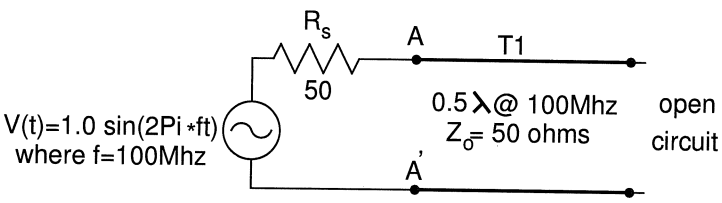
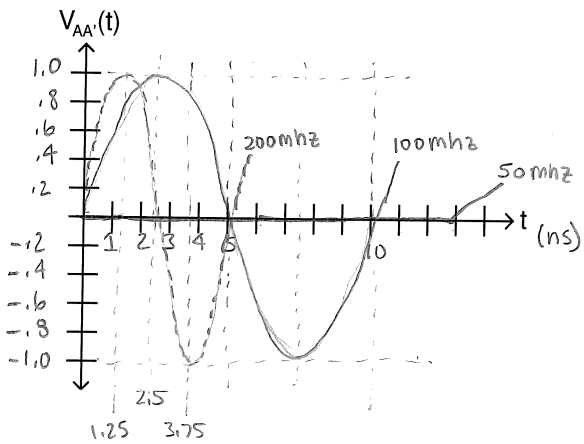
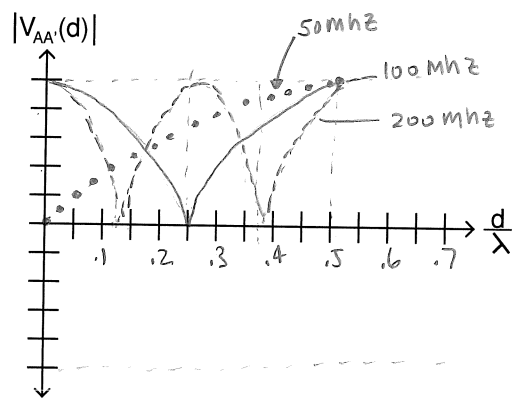
6. For the circuit below,

(a) Sketch the voltage waveform at the input to the transmission line AA' for $f = 100Mhz$, $f = 200Mhz$, $f = 50Mhz$. Provide the units and scale on the graph.

(b) For each frequency in (a), draw the value of $|V_{aa}(d)|$. The line is still 0.5λ long at 100Mhz.







$\frac{\lambda}{2}$ line with open circuit end presents an open circuit to the input. At 2x the frequency its 1λ long, still reflecting the load to the input. At ½ frequency, the line is λ/4 long, presenting a short circuit to the input.