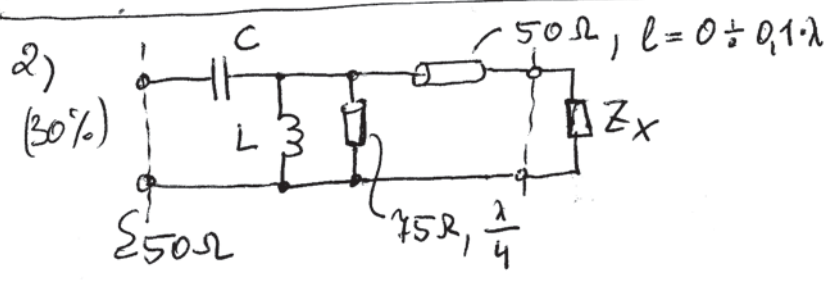


- o) Scattering matrix
- o) Network properties (2)
- o) ...



$C = 5\text{pF}$        $f = 10\text{GHz}$   
 $L = 3\text{nH} \dots 9\text{nH}$

- o) Range of values of  $Z_x$  that can be matched to  $50\Omega$  by this network.  
 ⇒ Note that  $L$  and the  $50\Omega$  line can be tuned to different values ⇒ this gives an area in the ~~the~~ Smith chart (marked by 4 points), where possible values of  $Z_x$  were located.

3) (30%): Similar to exercise problem 6.3 of WS 11/12

4) (20%): Similar to exercise problem 6.2 of WS 11/12