7.1 <u>With Single open shunt stub</u> Using the Smith chart as follows:



it can be found that the solutions are:

 $d_1$ =0.4059 $\lambda$ ,  $l_1$ =0.1224 $\lambda$ , and  $d_2$ =0.2276 $\lambda$ ,  $l_2$ =0.3776 $\lambda$ 

7.2 Using short stub yields



## 7.3 Open series stub



Short series stub

