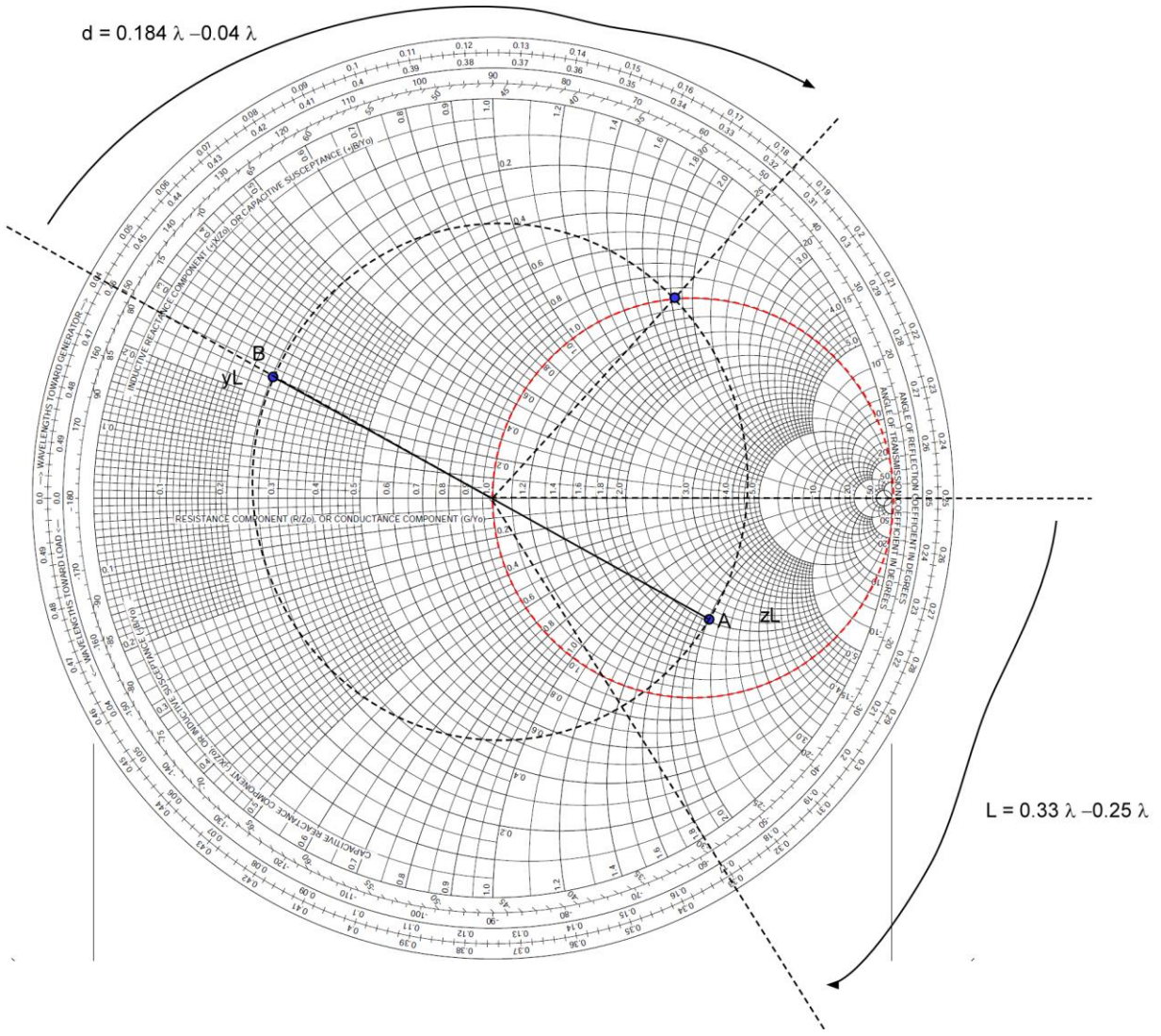
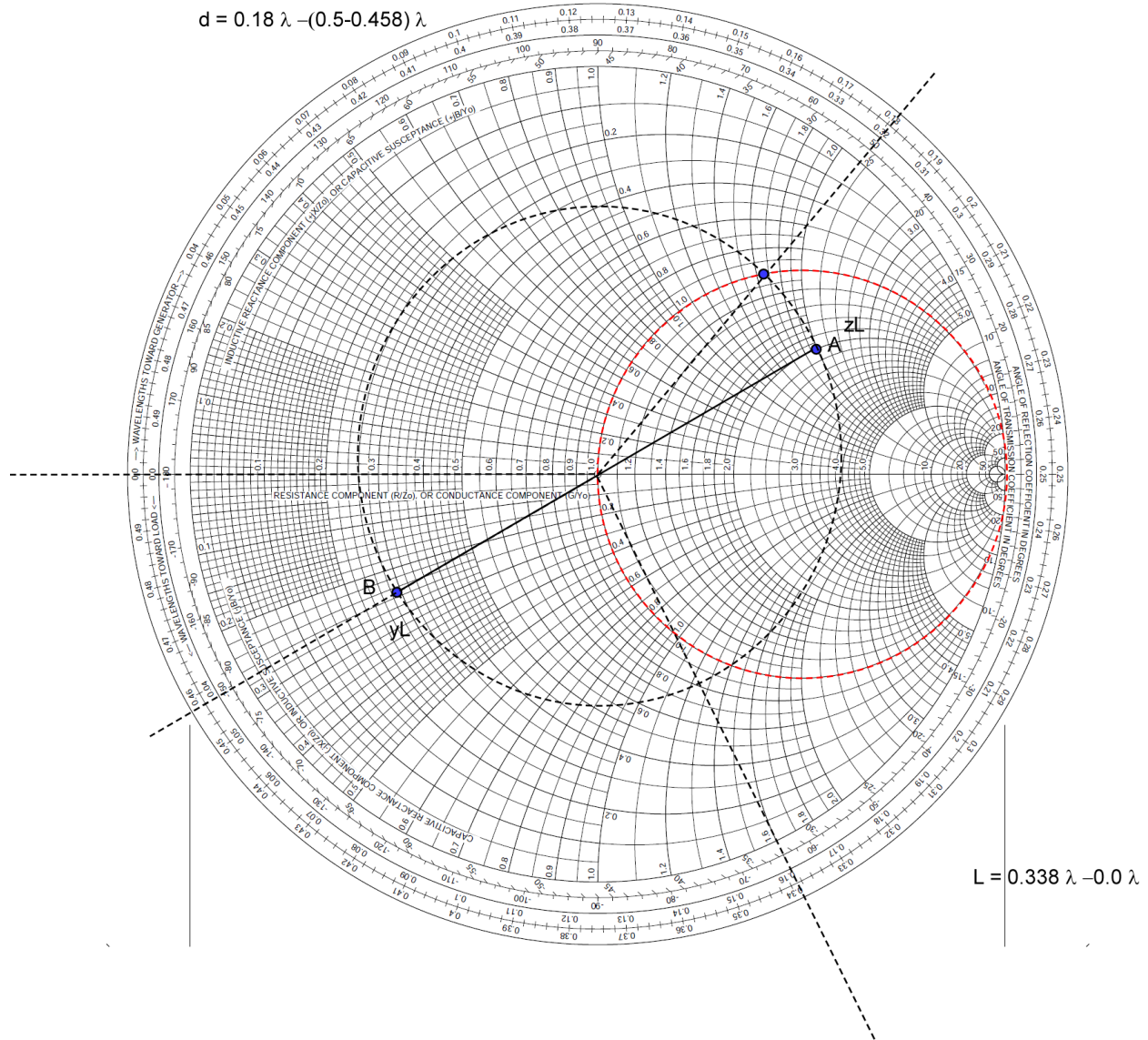


1. On a lossless  $50\text{-}\Omega$  transmission line terminated with a  $Z_L = 100 - j100\ \Omega$ . If this transmission line is matched to the load using a shorted load stub. Determine the stub length and distance between the load and stub. Two possible answers. You only need to show one of them



2. On a lossless 50-Ω transmission line terminated with a  $Z_L = 100 + j100 \Omega$ . If this transmission line is to be matched to the load using an open circuit transmission line. Determine the stub length and distance between the load and stub. Two possible answers. You only need to show one of them

$$d = 0.18 \lambda - (0.5 - 0.458) \lambda$$



$$L = 0.338 \lambda - 0.0 \lambda$$