

ECE 311 - Homework #23

Active filters with complex poles

Problem 1) Design an active filter to implement the following transfer function

$$Y = \left(\frac{100s}{(s+1+j10)(s+1-j10)(s+20)} \right) X$$

Problem 2) Design an active filter to implement the following transfer function

$$Y = \left(\frac{2000}{(s+20\angle 70^\circ)(s+20\angle -70^\circ)(s+20)} \right) X$$