

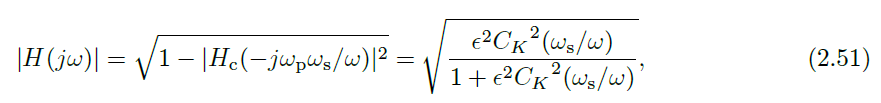
We know:

Using eq 2.53 in book:

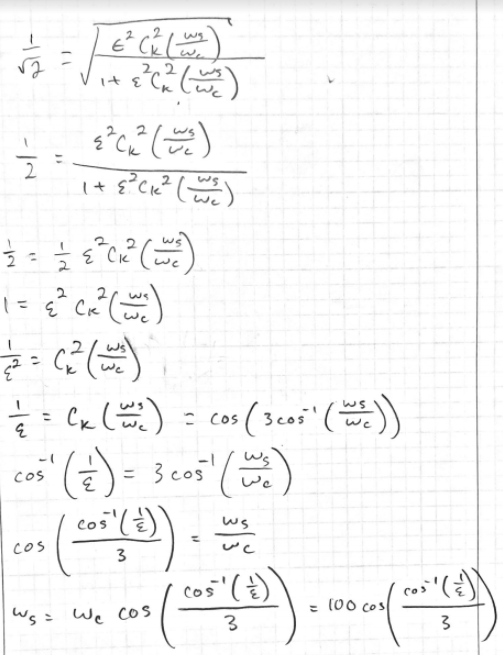


Then, using eq 2.42 and eq 2.51 in book:

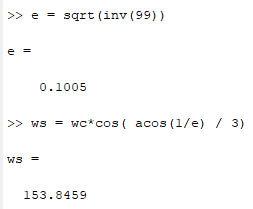




We know that

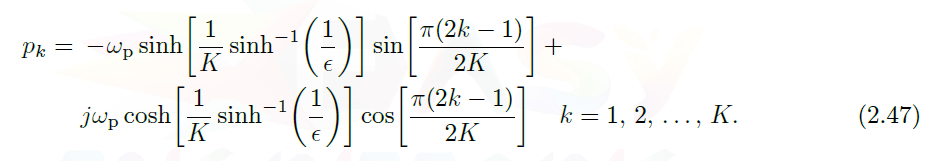


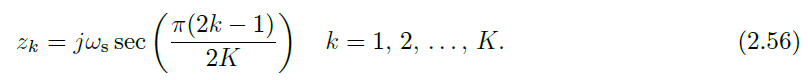
Then our stopband frequency is

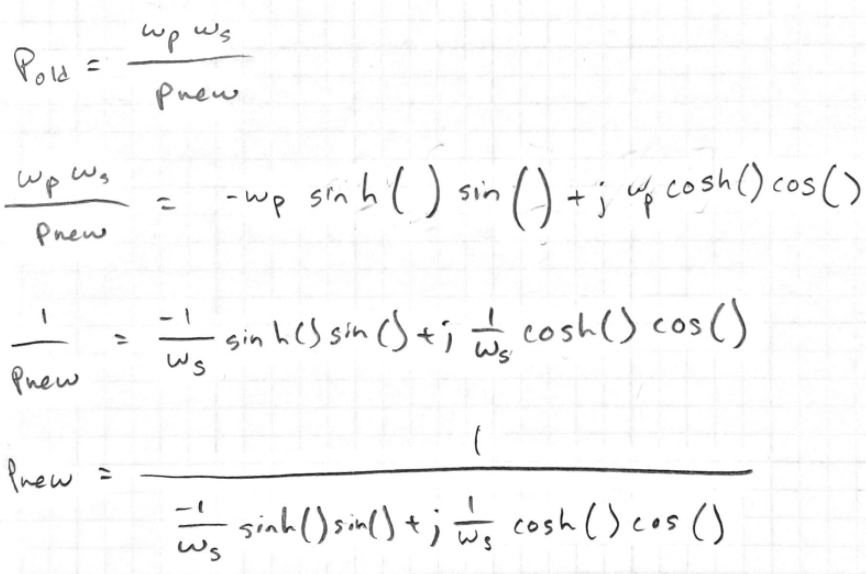


Now, using eq 2.47, 2.55, and 2.56 we can figure out the poles/zeros. Eq 2.55 can be set equal to 2.47 to remove the passband frequency variable.









In MATLAB,

