



## Solution

The complex part of the pole is the resonance

The real part of the pole is the bandwidth/2

$$G(s) \approx k \frac{s}{(s+1+j5)(s+1-j5)(s+2.25+j19.5)(s+2.25-j19.5)}$$

Match the gain at a point (max gain = 1)

k = 720 (from Matlab)

$$G(s) \approx \frac{720s}{(s+1+j5)(s+1-j5)(s+2.25+j19.5)(s+2.25-j19.5)}$$

