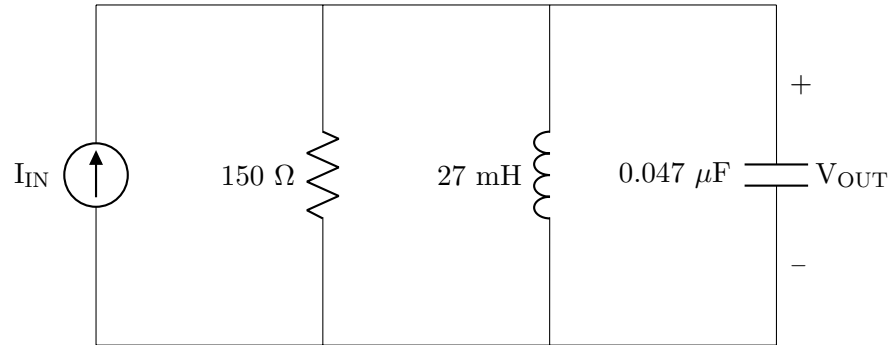
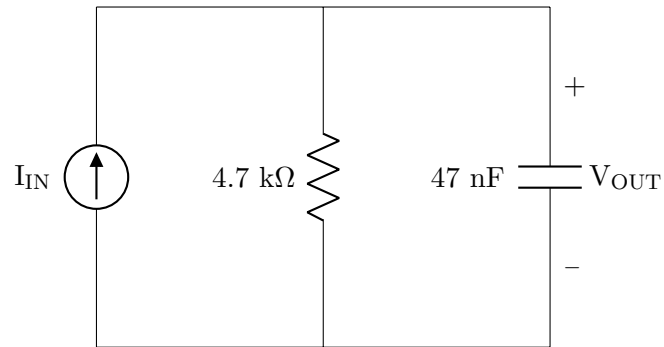


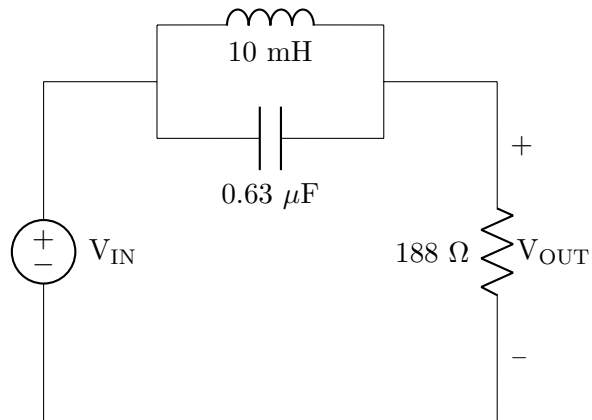
1. Find the center frequency and bandwidth of this filter:



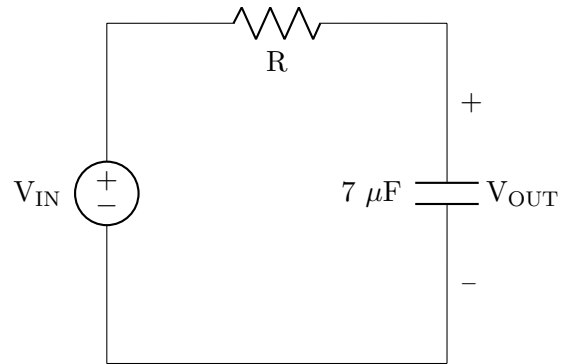
2. Find 1) the maximum gain and 2) the cut-off (half-power) frequency



3. Find 1) the two cut-off (half-power) frequencies 2) Bandwidth and Q-factor



4. Find the value of R that results in a cut-off frequency 20 kHz. What type of filter is this?



5. What is the output of a circuit with a gain of $A=3.5\angle 140^\circ$ and the input is $V_I=1.9\angle 145^\circ$ mV?