EECS 212 Special Problem #16-A

For the circuit shown, find the three resonant frequencies of this circuit in terms of the component values. Show that two of them are series-type resonances (i.e., where $Z_{in}$ is minimized) and one is a parallel type (i.e., where $Y_{in}$ is minimized). Where is the location of the parallel resonance in terms of the two series resonances?