1.   High-pass filter. Cutoff frequency is same as if R1 removed and R2 changed to R1 + R2.

2.   Thevenin equivalent has $R_{Th} = R_1 || R_2 = 800\Omega$. $1\ GHz < \omega_c < 1\ THz$

3. $\omega_{c1} = 346.5\ Mr/s$, $Q = 4/3$

4. $\omega_0 = 500\ Mr/s$, $\omega_{c2} = 1\ G\ r/s$