Math 191, Networks, UCLA, Spring 2018
Quiz 1

1. Consider an unweighted, undirected, simple network.

    a. Show that the smallest eigenvalue of the combinatorial graph Laplacian $\mathbf{L} = \mathbf{D} - \mathbf{A}$ is 0.

    b. Show that the number of components in the network is equal to the number of 0 eigenvalues of $\mathbf{L}$.