

## Exercise 4-1-8

A. J. Roberts, August 11, 2020

For each of the following networks:

- label the nodes;
- construct the symmetric adjacency matrix  $A$  such that  $a_{ij}$  is one if node  $i$  is linked to node  $j$ , and  $a_{ij}$  is zero otherwise (and zero on the diagonal);
- in Matlab/Octave use `eig()` to find all eigenvalues and eigenvectors;
- rank the ‘importance’ of the nodes from the magnitude of their component in the eigenvector corresponding to the largest (most positive) eigenvalue.

