

This miniproject asks you to investigate adjacency and incidence matrices for graphs.

- (a) Find an adjacency matrix for  $K_n$ .
- (b) Find an adjacency matrix for  $C_n$ .
- (c) Find an adjacency matrix for  $W_n$ .
- (d) Find an adjacency matrix for  $K_{m,n}$ .
- (e) What is the sum of the entries in a row of the adjacency matrix for an undirected graph?
- (f) What is the sum of the entries in a row of the adjacency matrix for a directed graph?
- (g) What is the sum of the entries in a column of the adjacency matrix for a directed graph?
- (h) What is the sum of the entries in a row of the incidence matrix for an undirected graph?