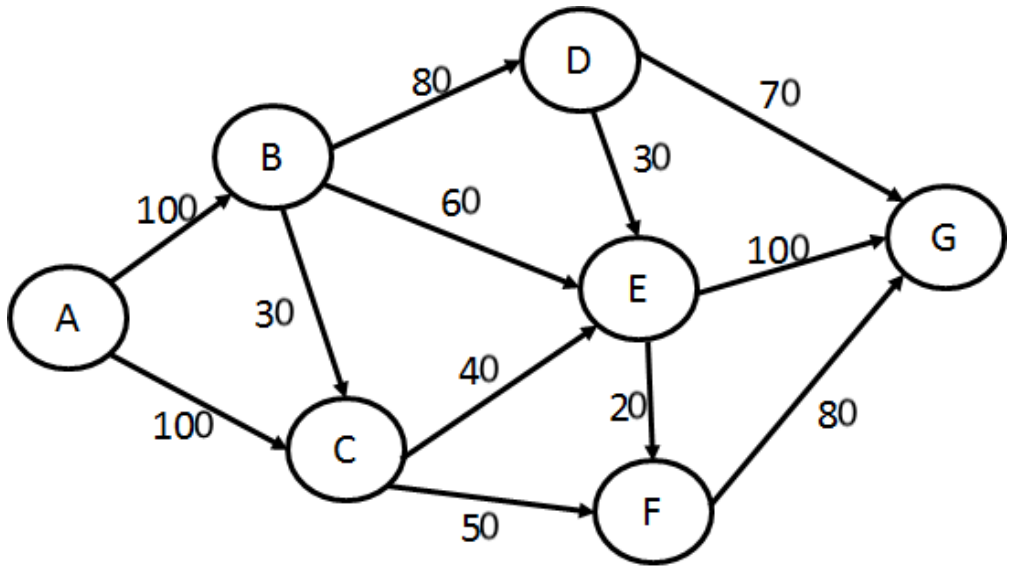
Problem 2 - Max Flow: The network below depicts the maximum possible flow of vehicles per minute between 7 busy traffic intersections in Miami. What is the maximum possible flow rate per minute from A to G?



(a) Introduce only 12 decision variables (as many as the arcs of the network), as opposed to 7^2 decision variables, and formulate the problem as a Linear Programming Problem.

(b) Use MATLAB's linprog.m function to solve the Linear Program.

(c) Use MATLAB's function "graphmaxflow" to verify your answer in (b).