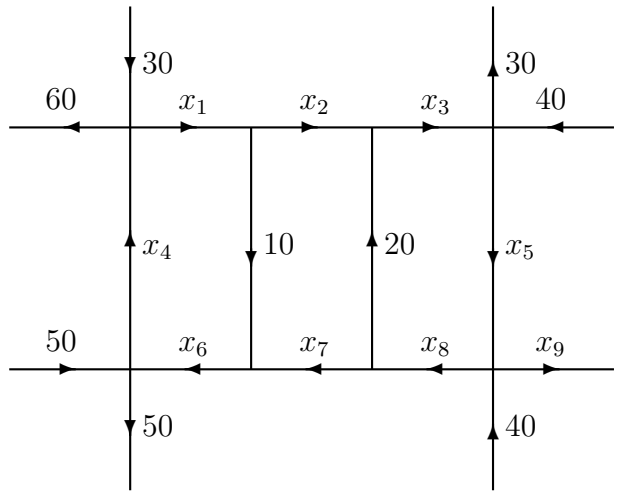
1.* Consider the traffic flow in the following system of one-way streets:



(a) Find the general solution to the system.
(b) Find the range for x_8, and then determine the range for each of the other eight variables.

*This problem is taken from the Linear Algebra lecture notes of W. W. L. Chen.