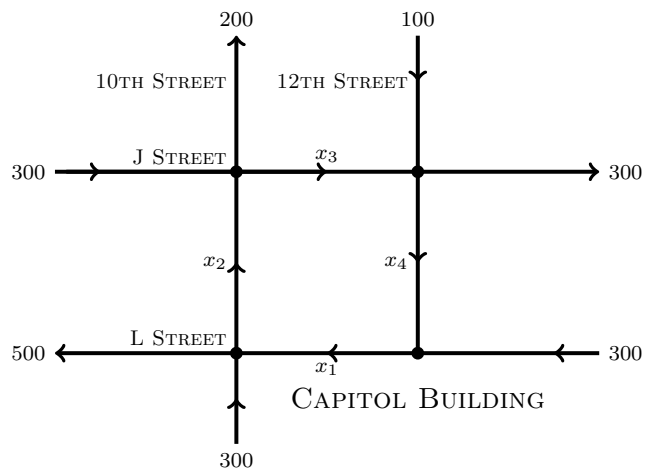# 05 – Applications

1. The network below shows the approximate traffic flow in vehicles per hour over various one-way streets in downtown Sacramento near the capitol building.
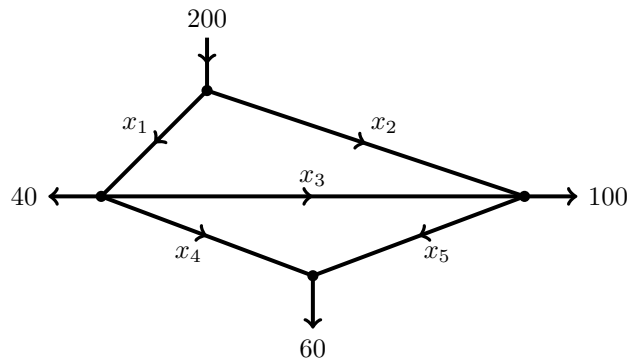

(a) Determine the general flow pattern.

(b) What is the smallest possible value for x_1? Why?

(c) Suppose that $x_4 = 150$. Determine the values for the remaining roads.

2. The traffic, in cars per minute, for a certain freeway network is given below.

(a) Determine the general flow pattern.

(b) What is the smallest possible value for x_4? Why?

(c) What is the largest possible value for x_5? Why?

(d) Suppose that $x_3 = 20$ and $x_5 = 30$. Determine the values for the remaining roads.