Exercise 9-1  \textit{Homogenous Poisson Models}

The following extract of a road network is given:

Labels of entering edges indicate the number of characters entering the represented area. Labels of the other edges indicate the probability that a character decides upon the corresponding way. Assume that the motion inside the road network follows a homogenous poisson process.

Calculate the missing probabilities and for every edge the expected number of characters who are located at every time on the way represented by the edge.

Exercise 9-2  \textit{Spatial Outlier Detection}

In the following relevant spatial positions (e.g. starting positions in an FPS or frequent camp positions in an MMORPG) are given. For every position a score is given additionally which depicts semantic information about the quality of the position (e.g. the average number of frags in an FPS or the average count of EP/coins per hour in an MMORPG).
Find the three strongest outliers in this dataset applying the Point Outlier Detection Algorithm with $k = 2$. Use the absolute score difference as weighting function.

**Exercise 9-3  Compression of trajectories**

Approximate the following trajectories with the Douglas Peucker Algorithm