

MiDiOwA Airlines (slogan: We have our ups and downs), services several mid-Iowa towns, and uses the following rule to determine its air routes: If A and B are two different towns, then there is an air route connecting A with B if and only if there is no town closer to A than B or there is no town closer to B than A . No other routes are created. If each distance between a pair of towns is different from the distance between every other pair of towns, prove that no town can be connected by a direct flight to more than five other towns.