Alibaba Group is the biggest online commerce company, one of their business in China called Tmall market – the order can be delivered within one day after customers made their order on online market. To meet the standard that order must be delivered to customers within 24 hours, Alibaba group need to build several warehouses in most cities in China to develop Tmall market. Recently, Alibaba group wants to expand their business to Chaoyang distinct, Beijing, an area of 120 square miles. The distance between a Tmall warehouse and a customer is when Alibaba located their warehouses properly. (A means the area of Chaoyang, n means number of warehouses)

Generally, Alibaba needs to spend $90,000 per year to maintain a warehouse and $ 400,000 to build a new warehouse, Alibaba assumes the warehouse life circle is 10 years, so the annual building expense is $ 400,00 for each warehouse. Also, because the order of Tmall market required a high efficiency of delivery, so the shipping cost per order is $1.25 per mile, instead of per order. In the Alibaba group the business strategy decision, Tmall will achieve 180,000 orders per year in Chaoyang. Use solver to find the optimum plan that help Alibaba group to achieve their goal and minimum the total cost.