Dersin Temel Konusu: Gerçekte yapılası zor olanı basite indirgeme yetkinliği

Örnek Problem Çözümü

1.3. Locating a Distribution Center Northeast Parts Supply is a wholesale distributor of components for printers, fax machines, scanners, and related equipment. Northeast stocks expensive spare parts, which dealers prefer not to hold, and offers same-day delivery on any order. The firm now serves eight dealers in the New England area and wishes to locate its distribution facility at a central point. In particular, its dealers have each been assigned a location on an x-y grid, and Northeast would like to find the best location for the distribution facility.

The eight dealers and their grid locations are shown in the following table:

Dealer	1	2	3	4	5	6	7	8
x-location	25	82	10	27	93	14	68	147
y-location	32	36	71	58	68	163	149	192

- (a) Determine the location that minimizes the sum of the distances from the distribution facility to the dealers.
- (b) Determine the location that minimizes the maximum distance from the distribution facility to any of the dealers.

Kitap Sayfa 18 – Exercise 1.3

Soru amacı: Satıcılarımın bulunduğu lokasyonlara minimum uzaklıkta depo kurmak.

Depo dan 1 noktasına uzaklık hesaplama =
$$\sqrt{(x_0 - x_1)^2 + (Y_0 - y_1)^2}$$

Deponun konulması gereken koordinatlar: X:47 Y:76 (Excel sayfa 1)

Maksimum uzaklığı minimize edersek: X:86 Y:11 (Excel Sayfa 2)

En uzakta ki depom 105 km daha yakın olsun : X : 74 Y : 116 (Excel Sayfa 2 (2)