1. A manufacturer produces clothes at four locations in Japan. Relative locations have been determined as shown in the table below. The location of a central shipping point for bolts of cloth must now be determined. Weekly quantities to be shipped to each location are given below. Determine the coordinate of the location that will minimize the distribution cost.

Location (x,y) weekly Qnty

A 5,7 15

B 6,9 20

C 3,9 25

D 9,4 30