## Regions for Three Pizzerias

NAME $\qquad$

After dividing Squaresville into two regions for two pizzerias, your next challenge is to divide it into three regions so that each house has their pizza delivered from the closest of the three pizzerias.


1. How many perpendicular bisectors did you need to construct? What is the name of the point where the three perpendicular bisectors meet? What is special about this point?
2. If a house located at the corner of D Street and 4th Street called for a delivery, which pizzeria would take the order?
3. What is the approximate area of each region to the nearest half block?
4. The number of pizza delivery calls is consistent for all of Squaresville, and you have 60 people overall to staff the three pizzerias. How many workers do you need for each pizzeria?
5. If you were able to move the three pizzerias, could they be placed such that the areas of their delivery regions would be equal? If so, sketch a map of Squaresville and the positions of the pizzerias below. If other configurations are possible, sketch them as well.
