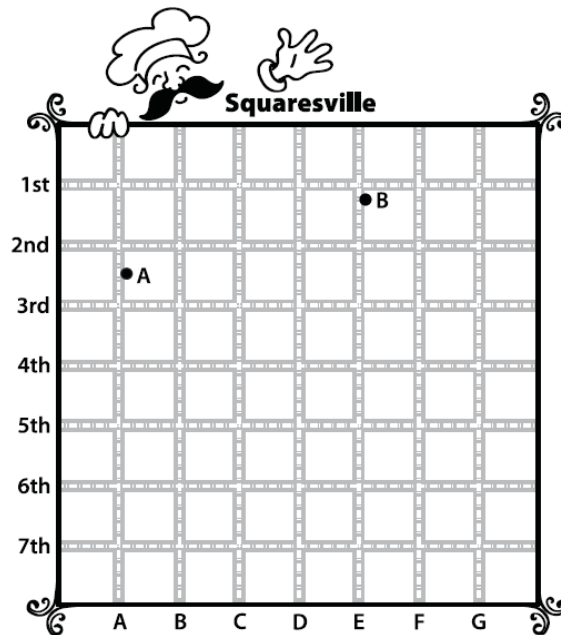


## Geometry – Unit 3 – Pizza Delivery Problem

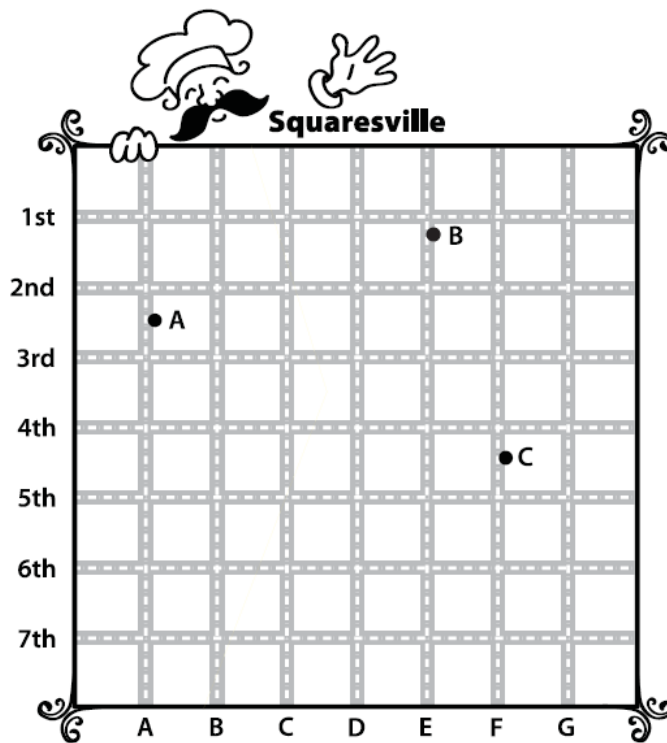
Determine how the town of Squaresville should be divided into two regions so that each house has their pizza delivered from the closer of the two pizzerias.



1. Explain your method for creating the two regions?
2. If a house was located at the corner of C Street and 5<sup>th</sup> Avenue called for a delivery, which pizzeria would take the order?
3. What is the approximate area of each region? (estimate to the nearest half block)
4. If you were to move the two pizzerias, could they be moved in such a way that the delivery areas would be equal? Replot A' and B' so that the areas are equal. Is there more than one? Plot a second one as well.

## Geometry – Unit 3 – Pizza Delivery Problem

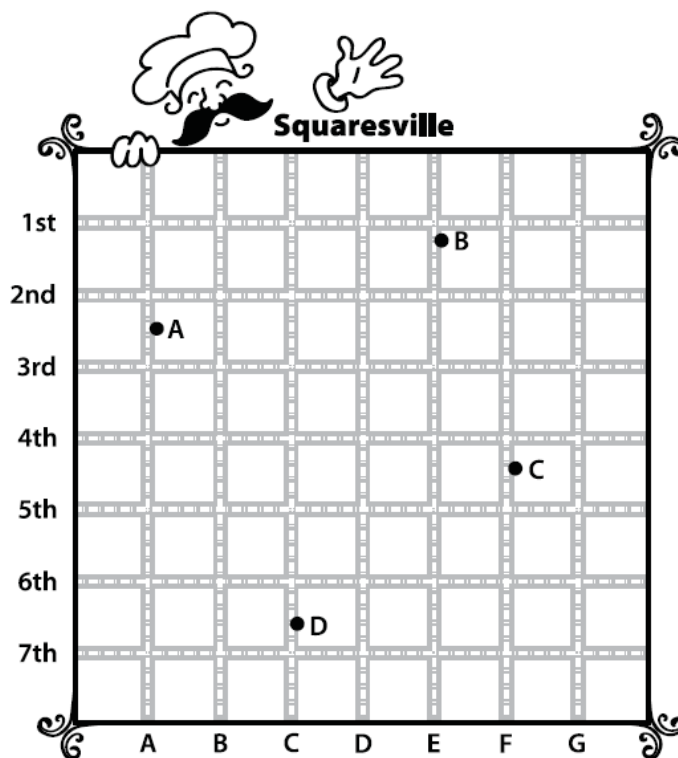
Squaresville Pizzeria added a third location. Divide the town so that NOW each location is getting pizza from the closest location.



5. Is there a method that you use to could divide up the neighborhood in a way that is easier than the 2-location map?
6. What is the approximate area of each region?
7. If you could reposition 3 pizzerias so that the areas were equal, where would the pizzerias be? Place the points on the map. Call them  $A'$ ,  $B'$ , and  $C'$ .

## Geometry – Unit 3 – Pizza Delivery Problem

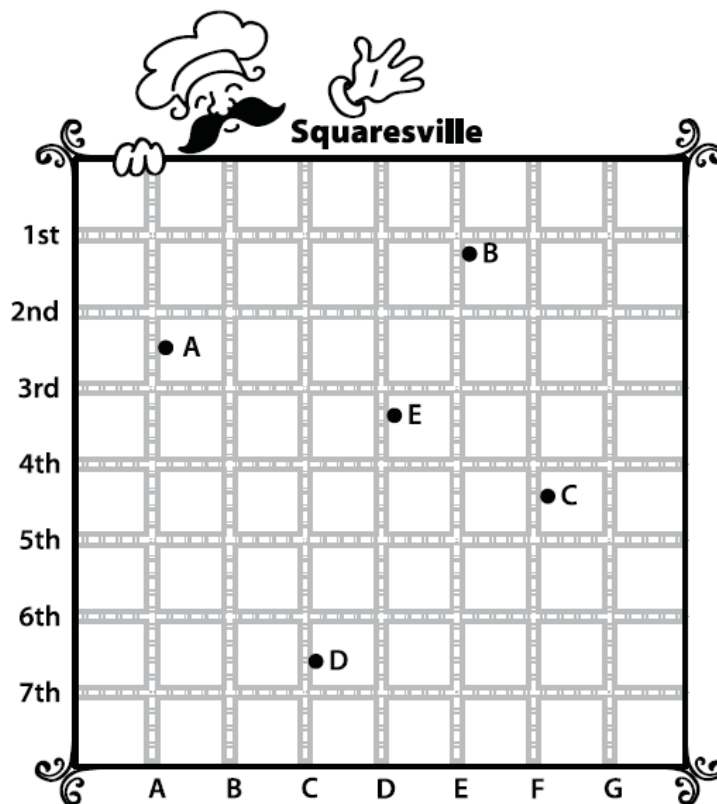
Squaresville Pizzeria added a fourth location. Divide the town so that NOW each location is getting pizza from the closest location.



8. Is there a method that you use to could divide up the neighborhood in a way that is easier than the 2-location map?
  
  
  
  
  
  
  
  
  
  
9. What is the approximate area of each region?
  
  
  
  
  
  
  
  
  
  
10. If you could reposition 4 pizzerias so that the areas were equal, where would the pizzerias be? Place the points on the map. Call them  $A'$ ,  $B'$ ,  $C'$ , and  $D'$ .

## Geometry – Unit 3 – Pizza Delivery Problem

Squaresville Pizzeria added a fifth location. Divide the town so that NOW each location is getting pizza from the closest location.



11. Is there a method that you use to could divide up the neighborhood in a way that is easier than the 2-location map?
12. What is the approximate area of each region?
13. If you could reposition 5 pizzerias so that the areas were equal, where would the pizzerias be? Place the points on the map. Call them  $A'$ ,  $B'$ ,  $C'$ ,  $D'$ , and  $E'$ .