Class work: Voronoi Diagrams

1. Draw the Voronoi diagram for a set of 2, 3 and 4 points.

2. Draw the Voronoi diagram for a set of 3 collinear points.

3. Show a set of n points where a vertex in Vor(P) has degree n.

4. Show a set of n points such that its Voronoi diagram contains a region with $n-1$ edges.

5. Consider two points a and b in the plane and a point p on the segment ab. Denote by $f(p)$ the minimum distance of p to one of a, b: $f(p) = \min\{d(p,a), d(p,b)\}$. At what point p is $f(p)$ maximum?

   What point inside a triangle maximizes the minimum distance to one if its vertices?

6. Show the medial axis for a rectangle.