1. Let $S$ be this set of points: (0,0), (0,1), (1,1) and (2,0).
   
   For every point $p$ in $S$, define $T(p)$ as the region of points in the plane for which $p$ is the second closest point in $S$.
   
   For every pair of points, $a, b$ in $S$, define $R(a, b)$ as the region of points in the plane for which $a, b$ are the two closest points in $S$.
   
   (a) Draw all $T$-regions of $S$.
   (b) Draw all $R$-regions of $S$.
   (c) Show how to compute all $T$-regions of a given set of $n$ points, and bound the size of the resulting graph.
   (d) Same question as (c), but for $R$-regions.