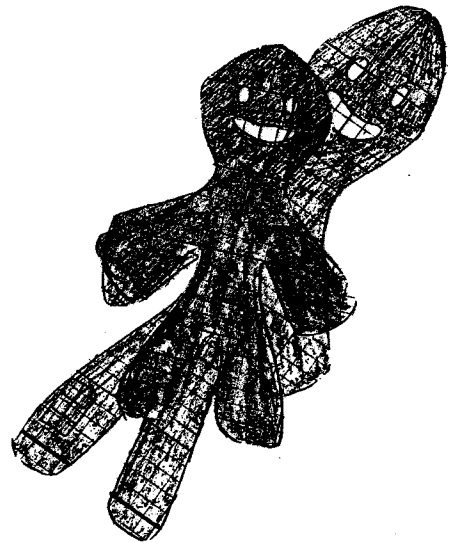
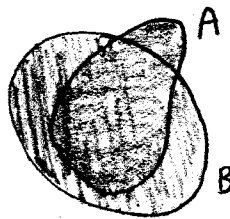
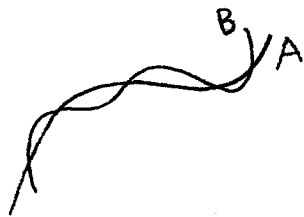


Ingredient 2: Hausdorff distance

Bob, fractals, are all (closed and bounded)
subsets of $\mathbb{R}^2$

Hausdorff figured out a good way to measure distance on
the space of these subsets



$\text{dist}(A, B) = \text{the larger of } \left\{ \begin{array}{l} \text{the maximum distance} \\ \text{from points in } A \\ \text{to (the nearest point)} \\ \text{in } B \end{array} \right\} > \left\{ \begin{array}{l} \text{the max dist} \\ \text{from points in} \\ B \text{ to (their} \\ \text{nearest) point} \\ \text{in } A \end{array} \right\}$