Davenport—Schinzel Sequences

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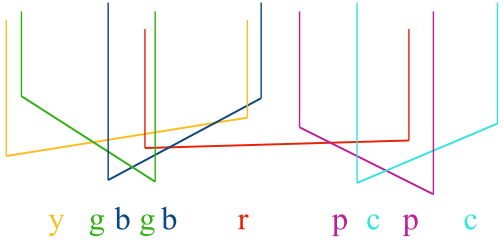
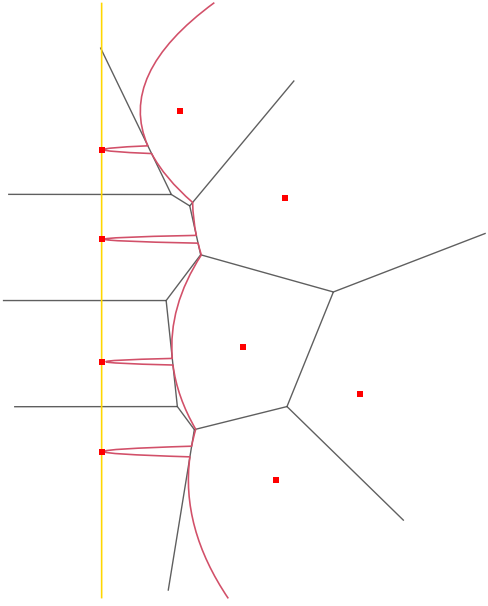
Definition

D—S sequence of order n: no *sebsequences* $a \ldots b \ldots a \ldots b \ldots$ of length $n + 2$

Motivation: lower envelope of continuous functions that coincide at no more than n points.



For each segment we can also construct the set of functions.

Voronoi diagrams and the beach line