

For any threshold we can create a graph where the vertices represent the curves and there is an edge between the vertices if the two curves intersect. For example:

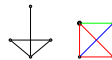


Figure 1: A threshold and its corresponding graph indicated W points

Since over curves are not intersect exactly once the resulting graph will be the complete graph on its vertices,  $K^n$ .

The intersection of curves only in a symmetric relation and so any W point will be a sub-graph of the complete graph.

Therefore the decomposition of the complete graph into sub-graphs is the number of W points which has to be larger than three or.



Figure 3: Examples of right thresholds for Conjecture 0.1

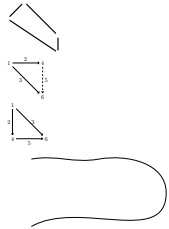
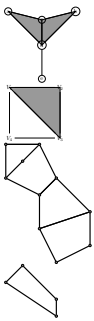
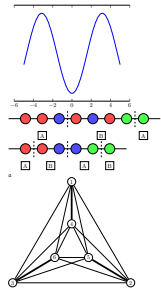
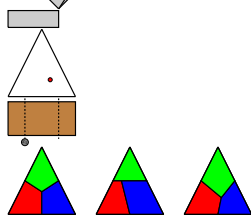
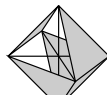
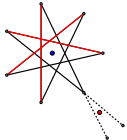


Figure 9: Example graph made with this.

