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Delaunay Triangulation

RIC Analysis

- Average Degree

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❖ Thus by a backward analysis,

we know that ...

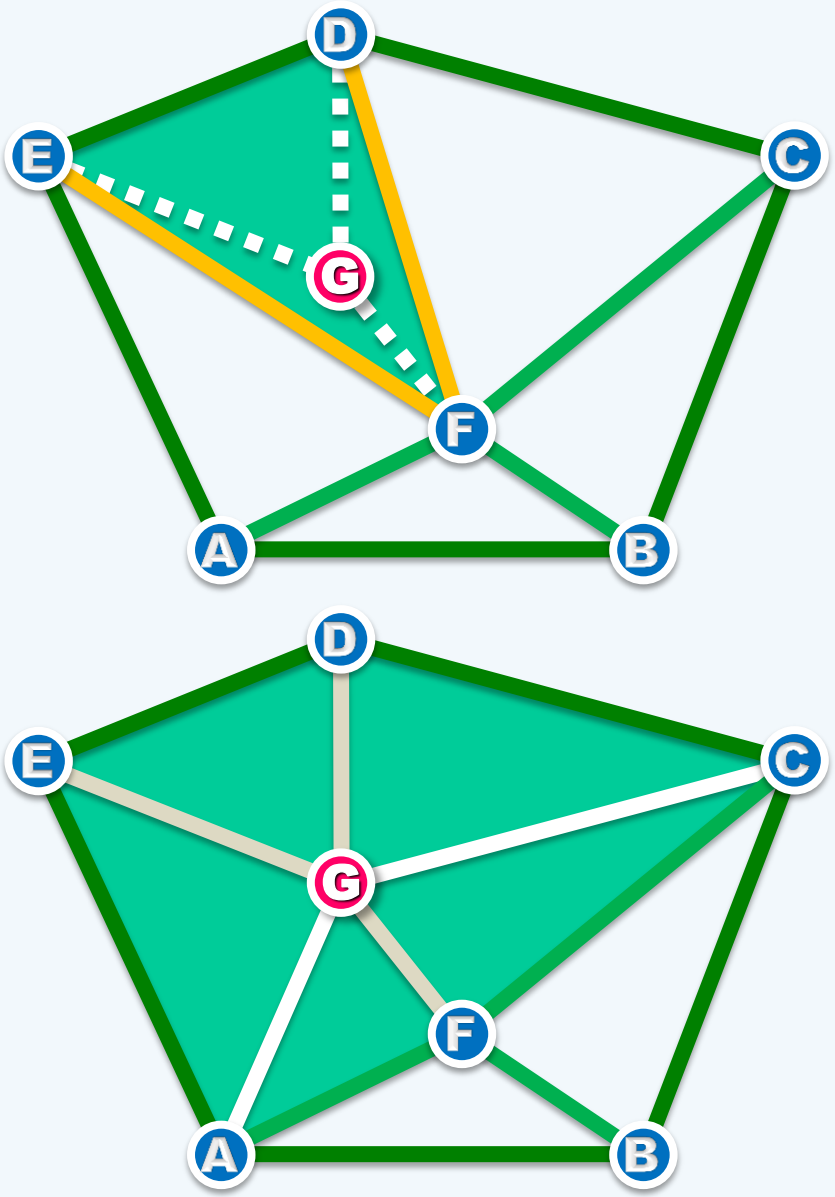
❖ The expected time

to insert the last point

is equal to

the average degree of a vertex

in the current triangulation



❖ Again from Euler's formula

we know that

- DT(S) has no more than $\mathcal{O}(3n)$ edges
- the average degree of a vertex in DT(S) is at most 6 and
- the expected number of edge changes for each insertion is $\mathcal{O}(6) = \mathcal{O}(1)$