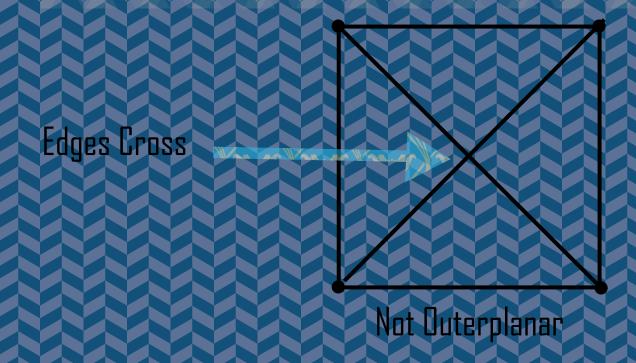
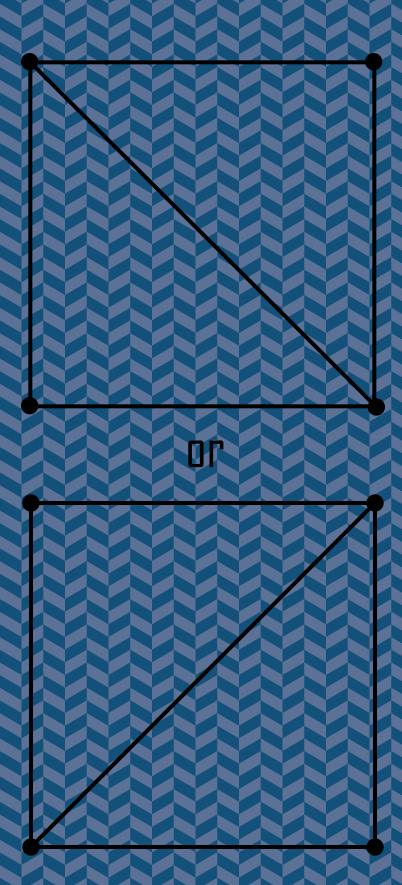
An outerplanar graph is a graph in which there are no crossings; furthermore, no vertices may be completely surrounded by edges.

A maximal outerplanar graph is an outerplanar graph in which no more edges can be added.



With an outerplanar polygonal graph, there can be thousands of ways to triangulate it. This number depends on how many vertices there are. For example, if there are four vertices, then we can only draw one diagonal in order to triangulate.

## Isomorphism of Maximal Outerplanar Graphs



To find the maximum number of triangles that can be drawn with non-intersecting lines in a given polygon is relatively easy using Euler's relation.

