

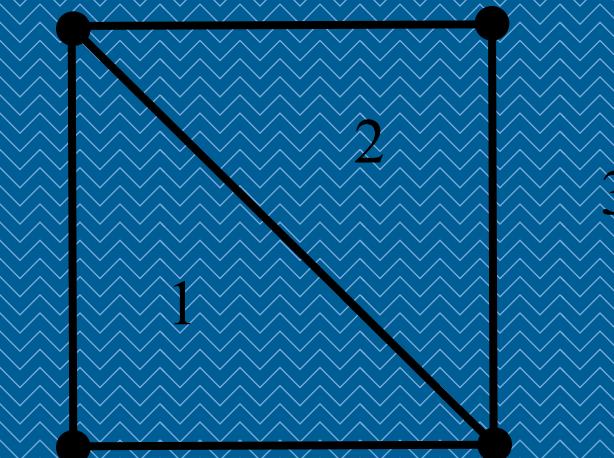
# Isomorphism of Maximal Outerplanar Graphs

David Bradley

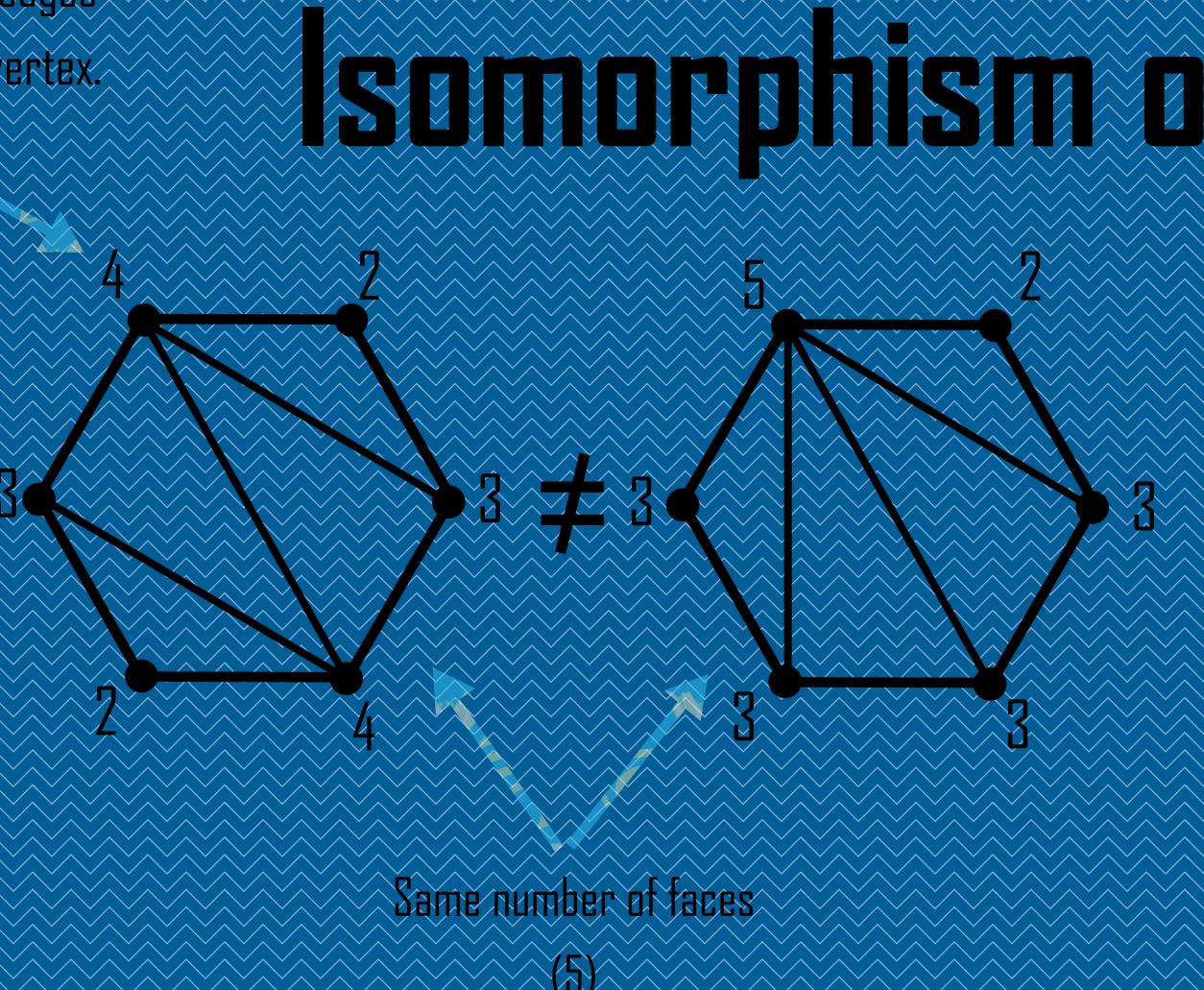
The number of edges, vertices, and faces makes up Euler's relation for planar graphs

One way to tell if graphs with the same number of vertices are isomorphic, is to look at the number edges that meet at each of the vertices.  
**If the numbers are different, then they are not isomorphic.**

Outerplanar graphs have faces. All on the outer regions.

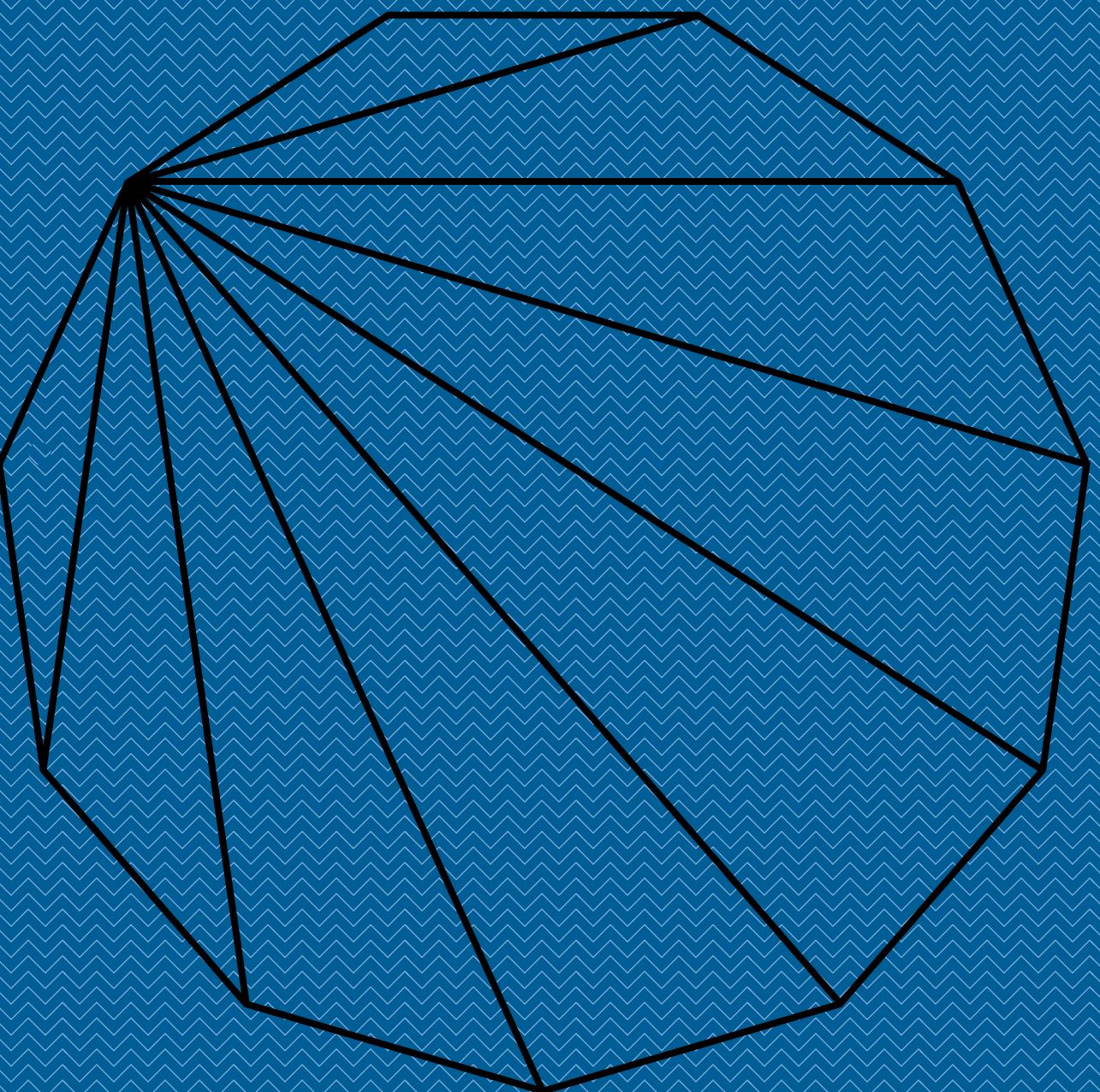


Shows the number of edges that converge on the vertex.



Furthermore, if you find that the number of edges that converge on the vertices are the same, look at the order in which they connect to neighboring vertices.

**If they are not ordered in the same way, then they are not isomorphic.**



Outerplanar Graph