Subject: Tessellate Question--fewest convex polys
Posted by Noname[1] on Fri, 08 Feb 2002 15:31:56 GMT
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Hello all,

What's the best way to tessellate a polygon so that the resulting connectivity array contains the _fewest_ number of convex polygons instead of every single triangle? I don't want to cut up shapes like squares and octagons, only shapes with concavities or holes like lima beans and donuts. IDLgrTESSELLATOR always tessellates polygons into triangles, as I understand it; squares become 2 triangles, octagons become 6 triangles, etc...

Using UNIQ and maybe MESH_MERGE I can get what I want by playing around with such a connectivity array of triangles, but as I am completely new to this I wonder if IDL already has this functionality or if this is a common and proven algorithm--or if I am just missing something obvious (most likely). Incidentally, what is the name for this type of tessellation? I know I've seen it implemented before in things like 3D video game level designers. For now I'd be happy with something that just worked in 2D.

Thanks for any help.