



The Hole Truth

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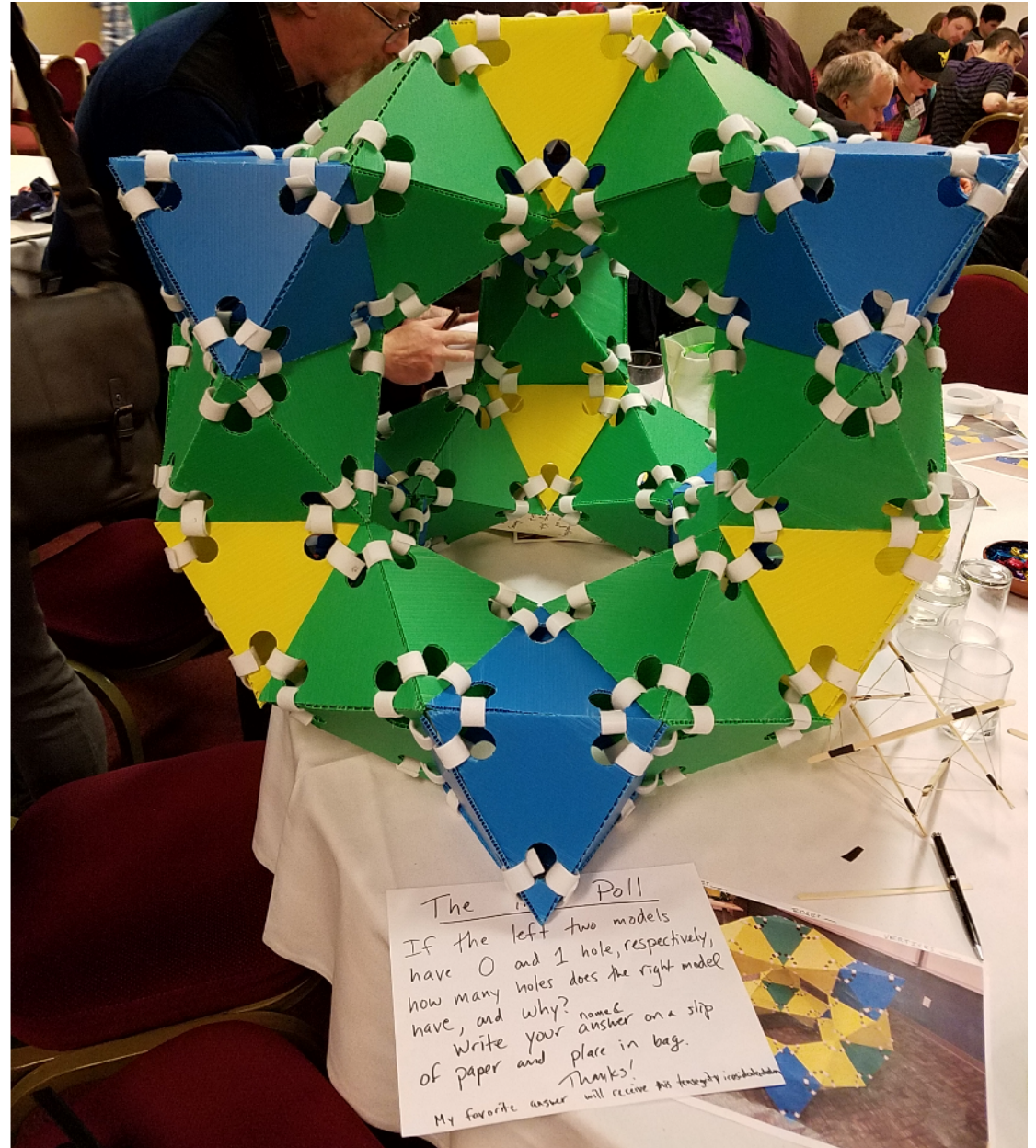
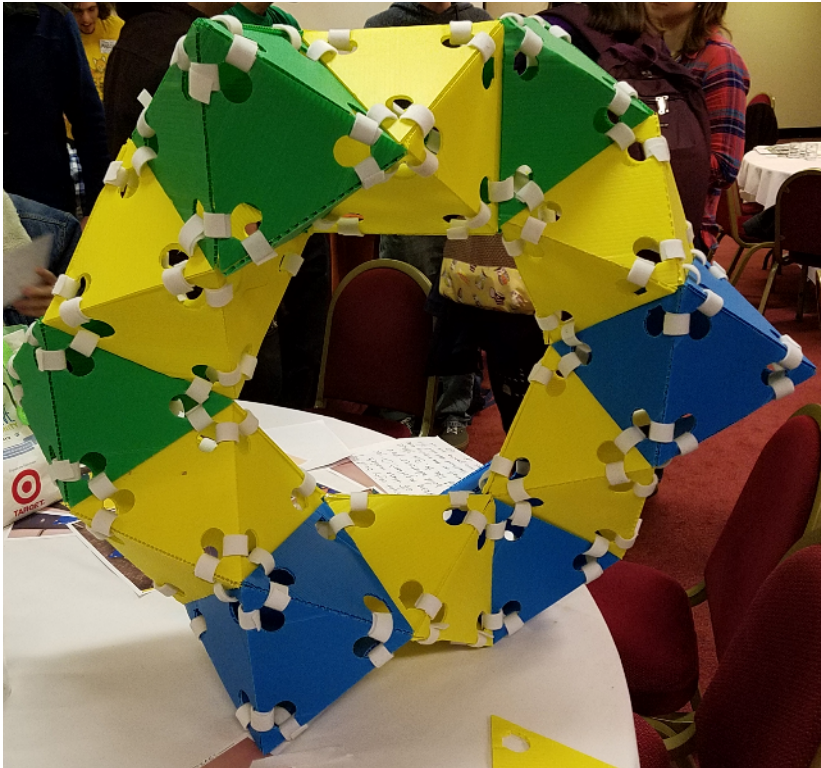
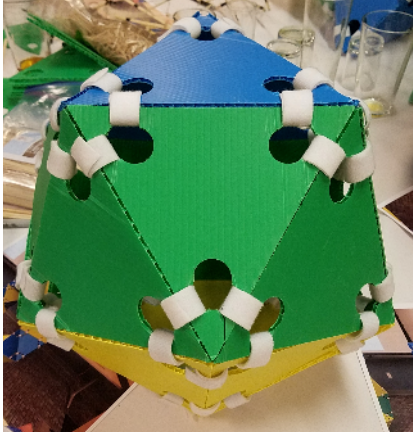


Some interesting objects



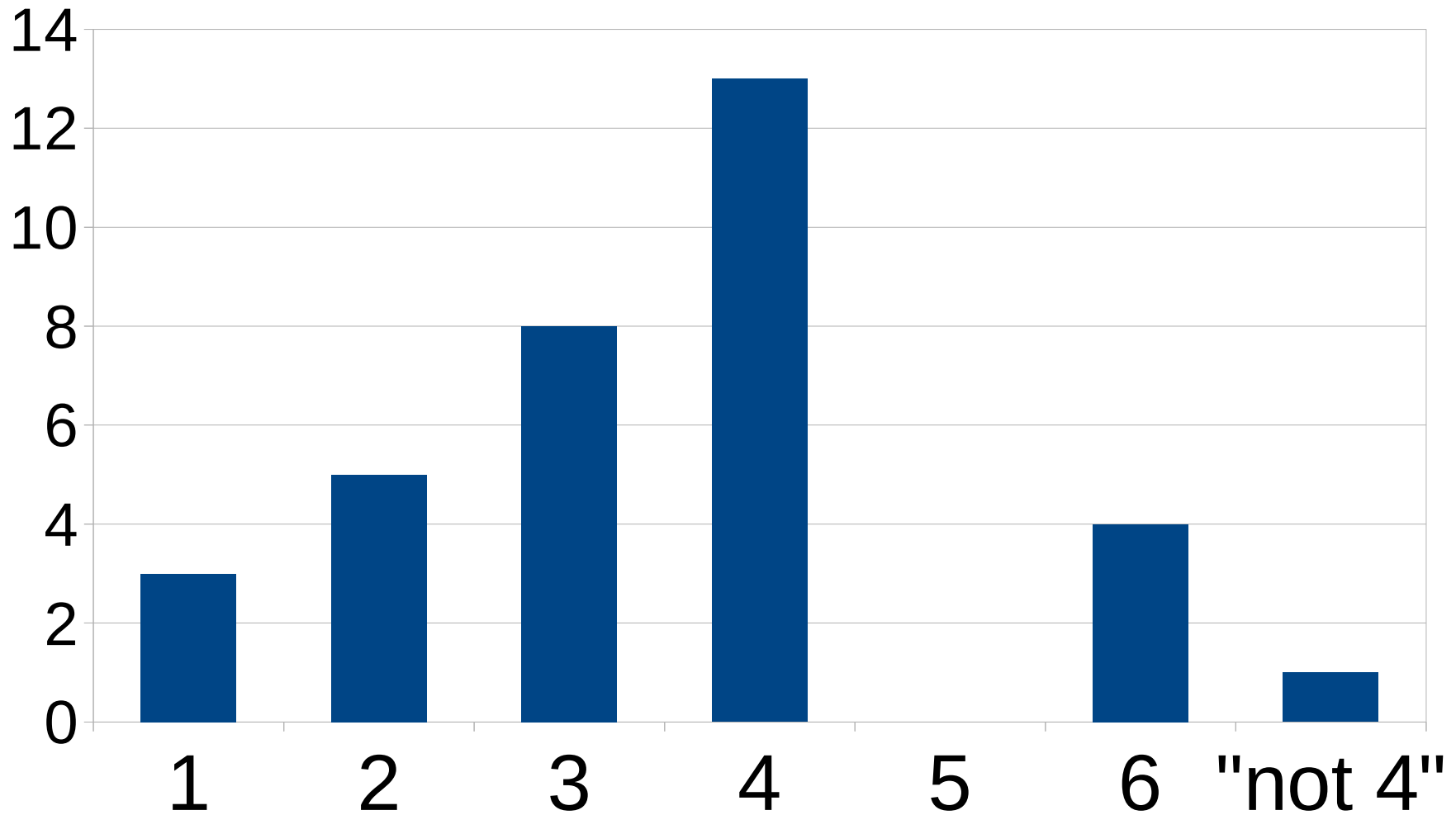


How many holes?





The Hole Poll





Ask Uncle Euler (part 1)

Name	Vertices	Edges	Faces	$V - E + F$
Icosahedron	12	30	20	2



Ask Uncle Euler (part 2)

Name	Vertices	Edges	Faces	$V - E + F$
Icosahedron	12	30	20	2
Toroidal Deltahedron	36	108	72	0 (?!)



Ask Uncle Euler (part 3)

Name	Vertices	Edges	Faces	$V - E + F$
Icosahedron	12	30	20	2
Toroidal Deltahedron	36	108	72	0
Adamantane	60	192	128	



Ask Uncle Euler (part π)

Name	Vertices	Edges	Faces	$V - E + F$
Icosahedron	12	30	20	2
Toroidal Deltahedron	36	108	72	0
Adamantane	60	192	128	-4 (?!!)

3 holes ?!!



The doh knows...



Hole Poll Dole

Number	Reason (paraphrase)	Person
1	they're all the same hole	Sam Holloway
2	If a hole is a route through, can only use two routes at same time	Tom Briggs
3	If you close three holes, you're left with a bowl, which has no hole.	Dave Mitchell
4	Number of windows you can see through	Beverly Ralph
6	$4 \text{ choose } 2 = \# \text{ of ways through}$	Chris Gray
"not 4"	"proof by MathsJam"	Dave Bedford



Soul of Hole Poll

