

Schlegel Diagrams of Simple Convex Polyhedra with 10 or Fewer Faces

Emanuel A. Lazar*

August 22, 2012

Abstract

We display Schlegel diagrams of all convex, simple polyhedra with 10 or fewer faces. The exact number of such polyhedra are enumerated in Table 1.

n	Polyhedra
3	0
4	1
5	1
6	2
7	5
8	14
9	50
10	233

Table 1: The number of simple, convex polyhedra with n faces.



Figure 1: Simple Polyhedra with 4 Faces

*School of Mathematics, Institute for Advanced Study, Princeton, New Jersey 08540.

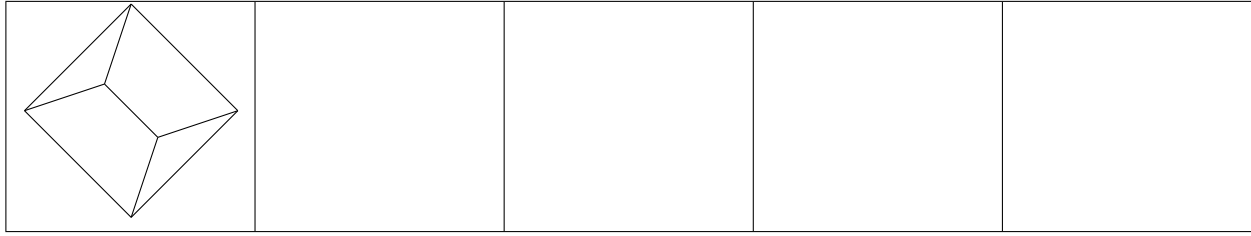


Figure 2: Simple Polyhedra with 5 Faces



Figure 3: Simple Polyhedra with 6 Faces

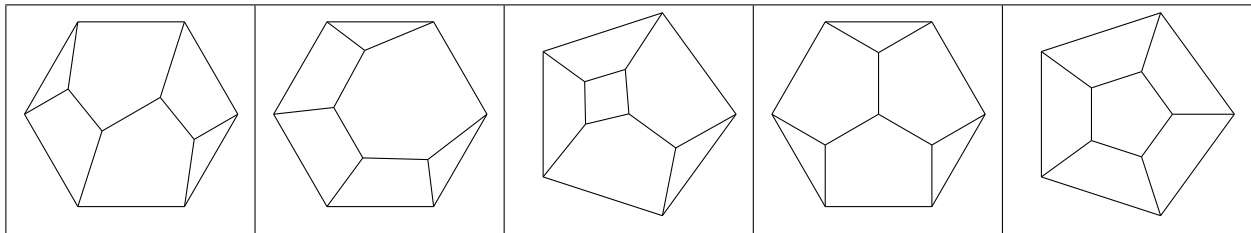


Figure 4: Simple Polyhedra with 7 Faces

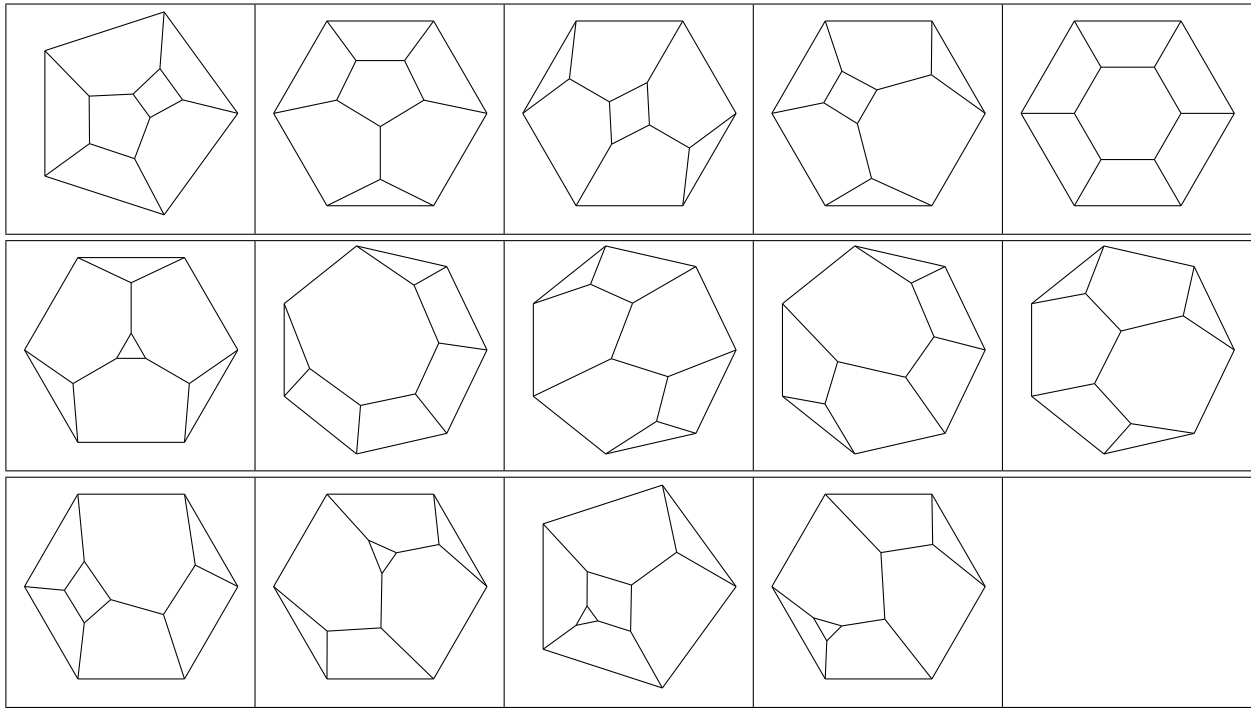


Figure 5: Simple Polyhedra with 8 Faces

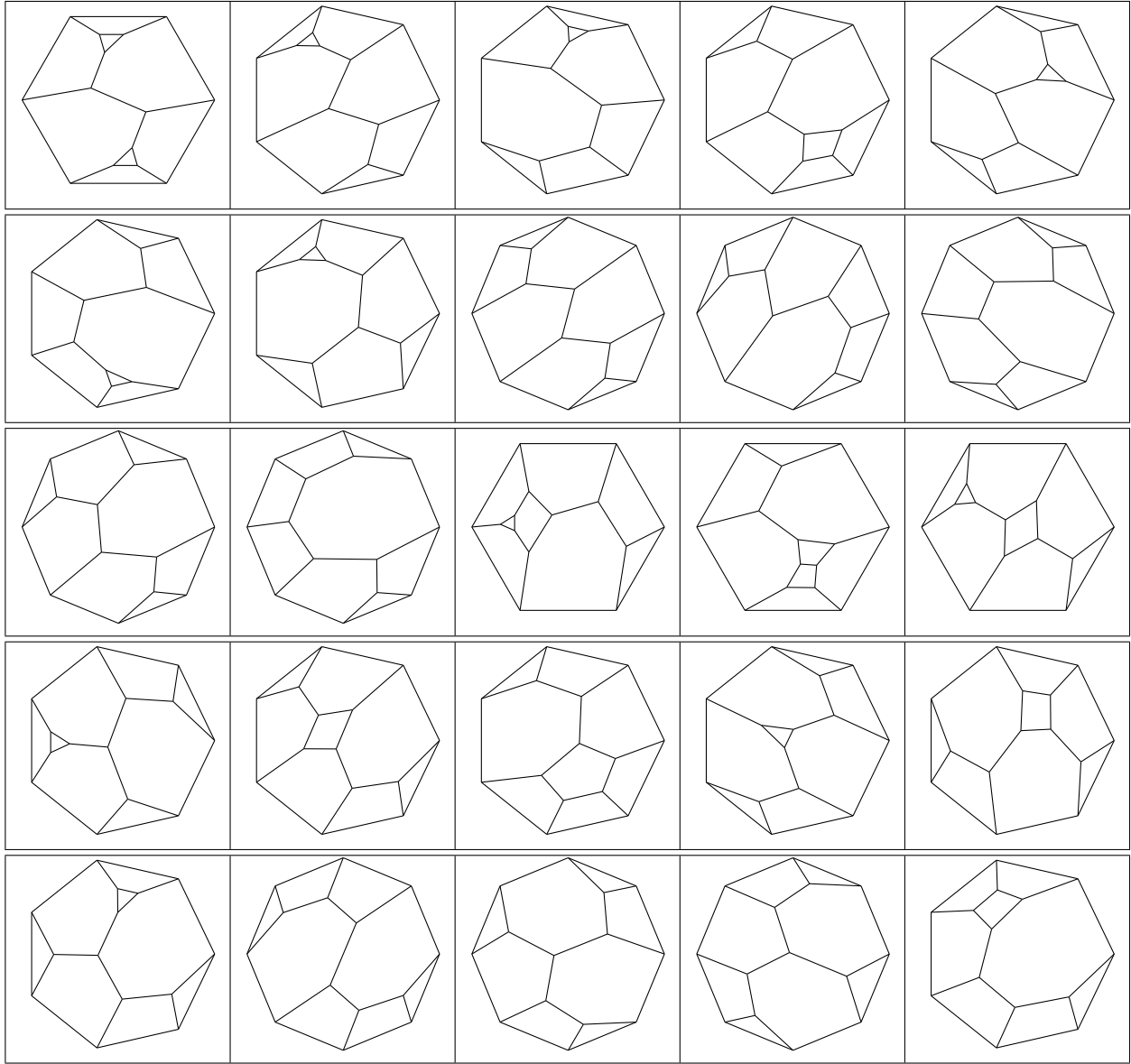


Figure 6: Simple Polyhedra with 9 Faces

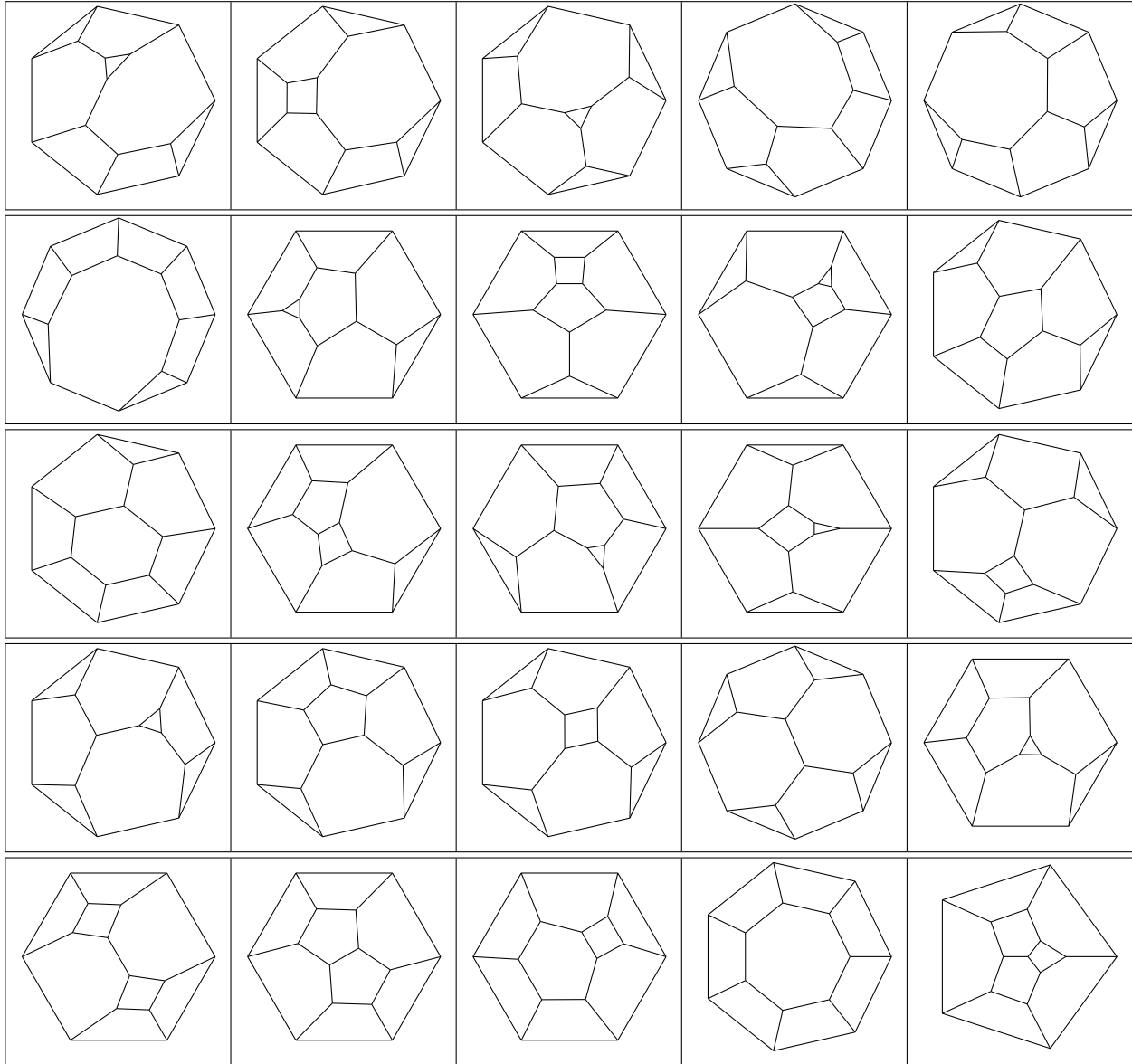


Figure 7: Simple Polyhedra with 9 Faces (continued)

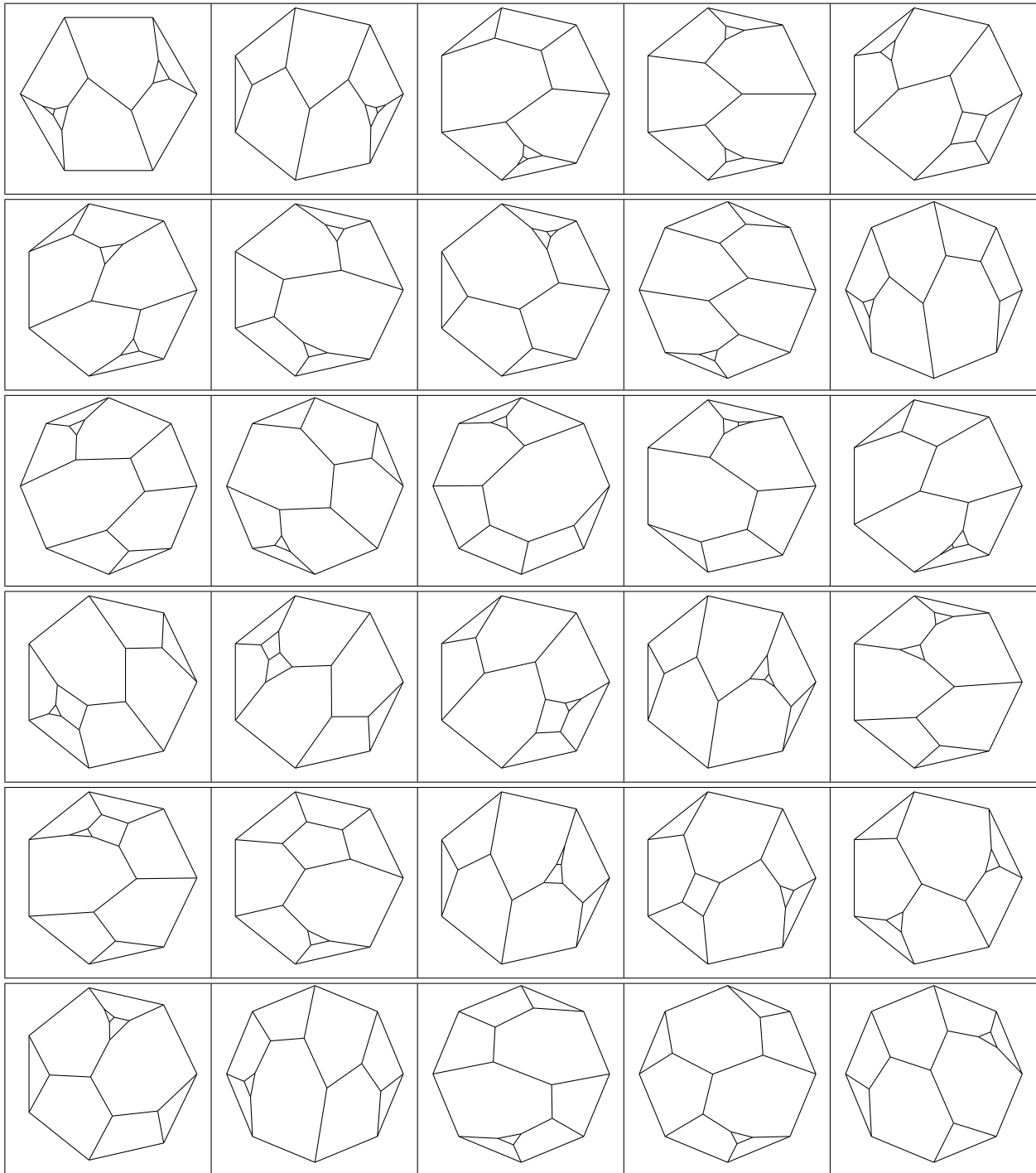


Figure 8: Simple Polyhedra with 10 Faces

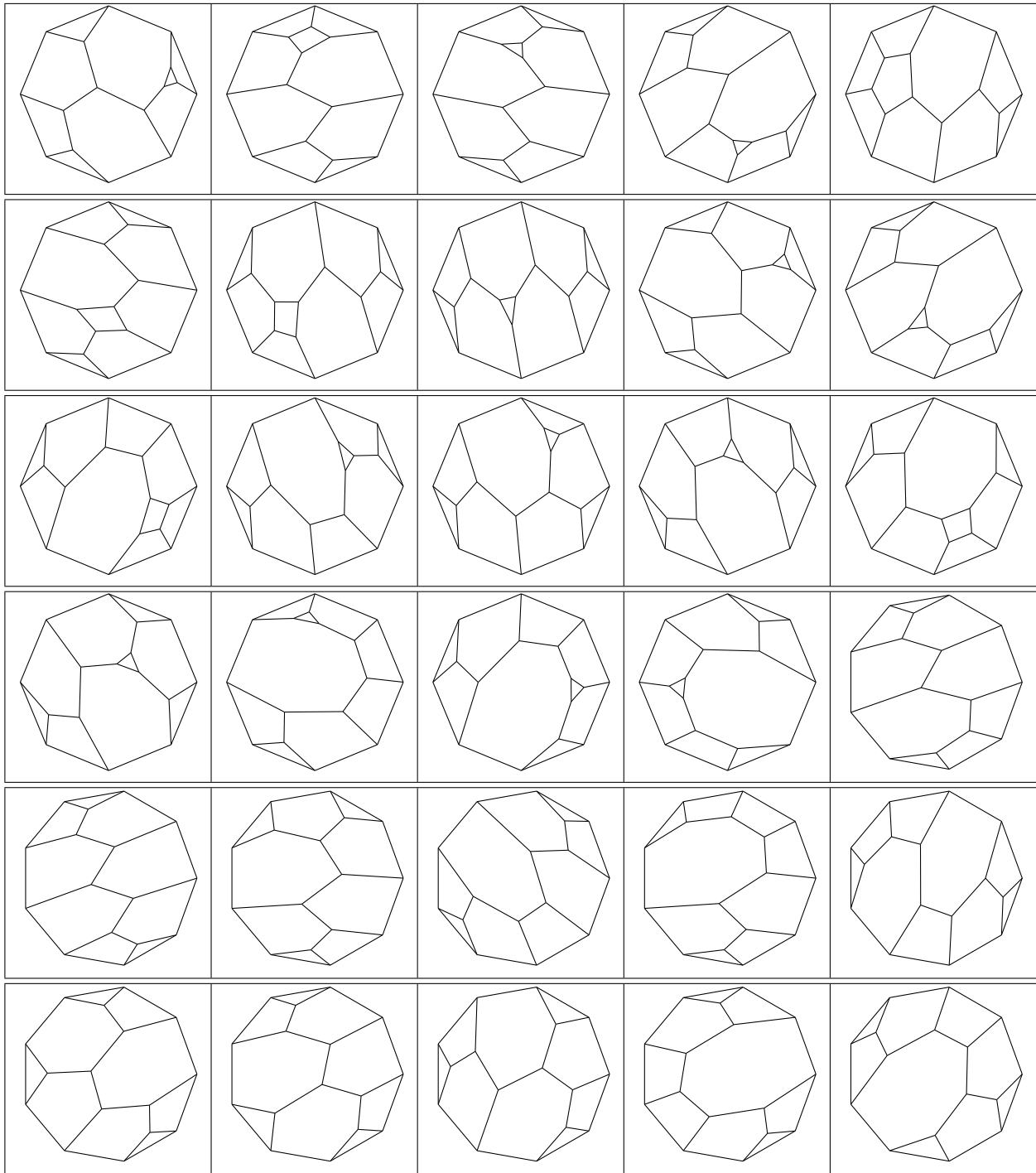


Figure 9: Simple Polyhedra with 10 Faces (continued)

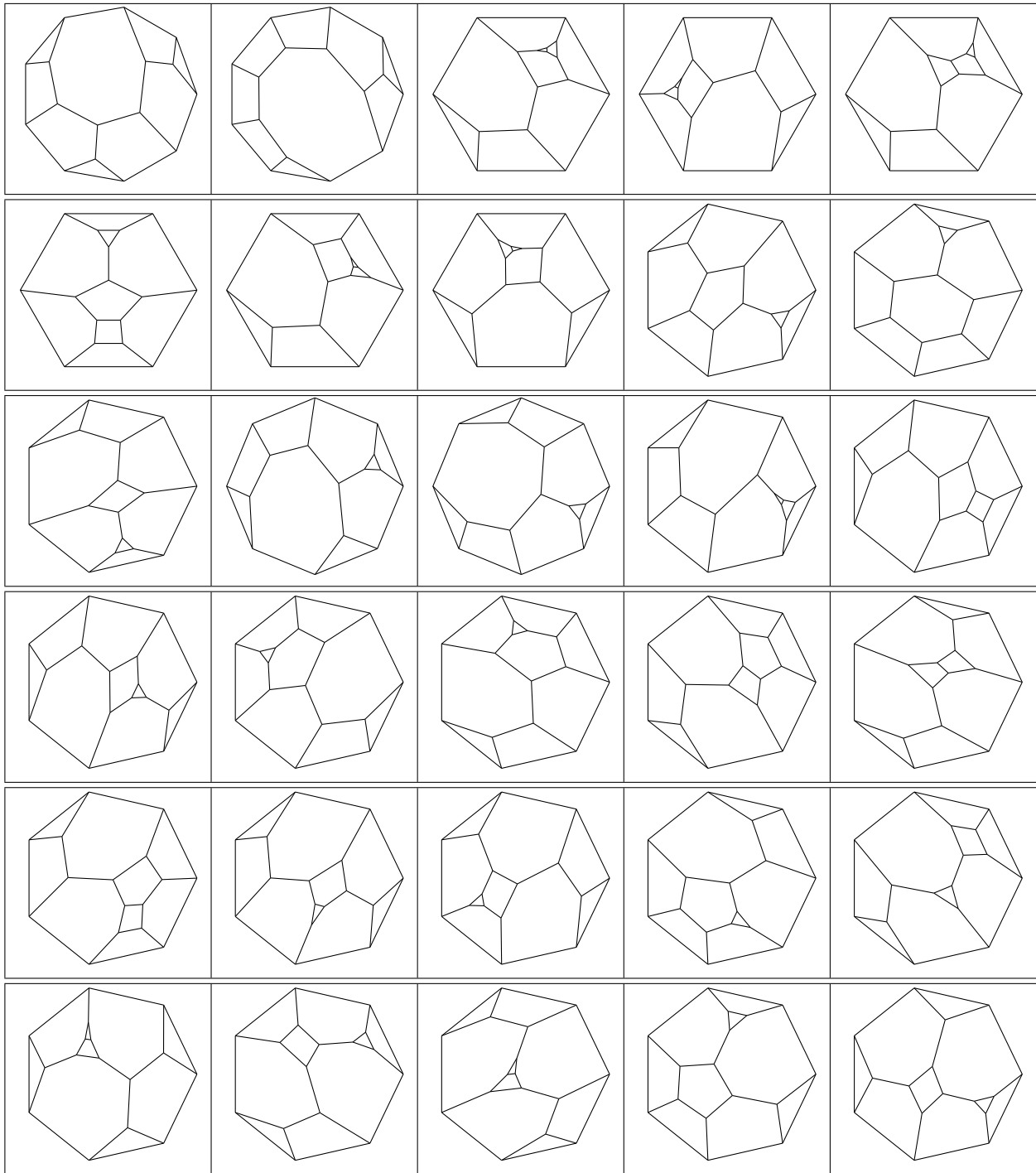


Figure 10: Simple Polyhedra with 10 Faces (continued)

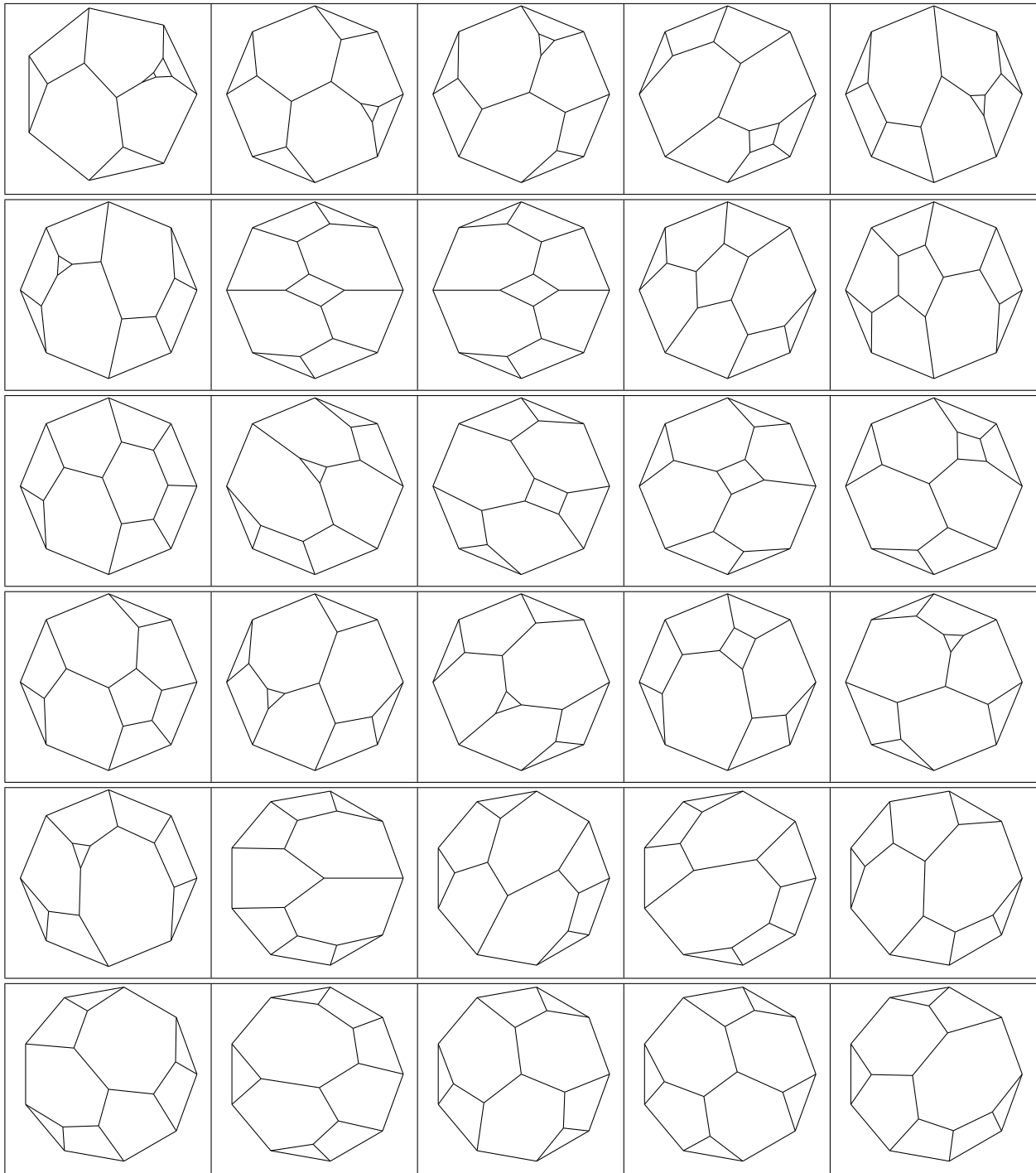


Figure 11: Simple Polyhedra with 10 Faces (continued)

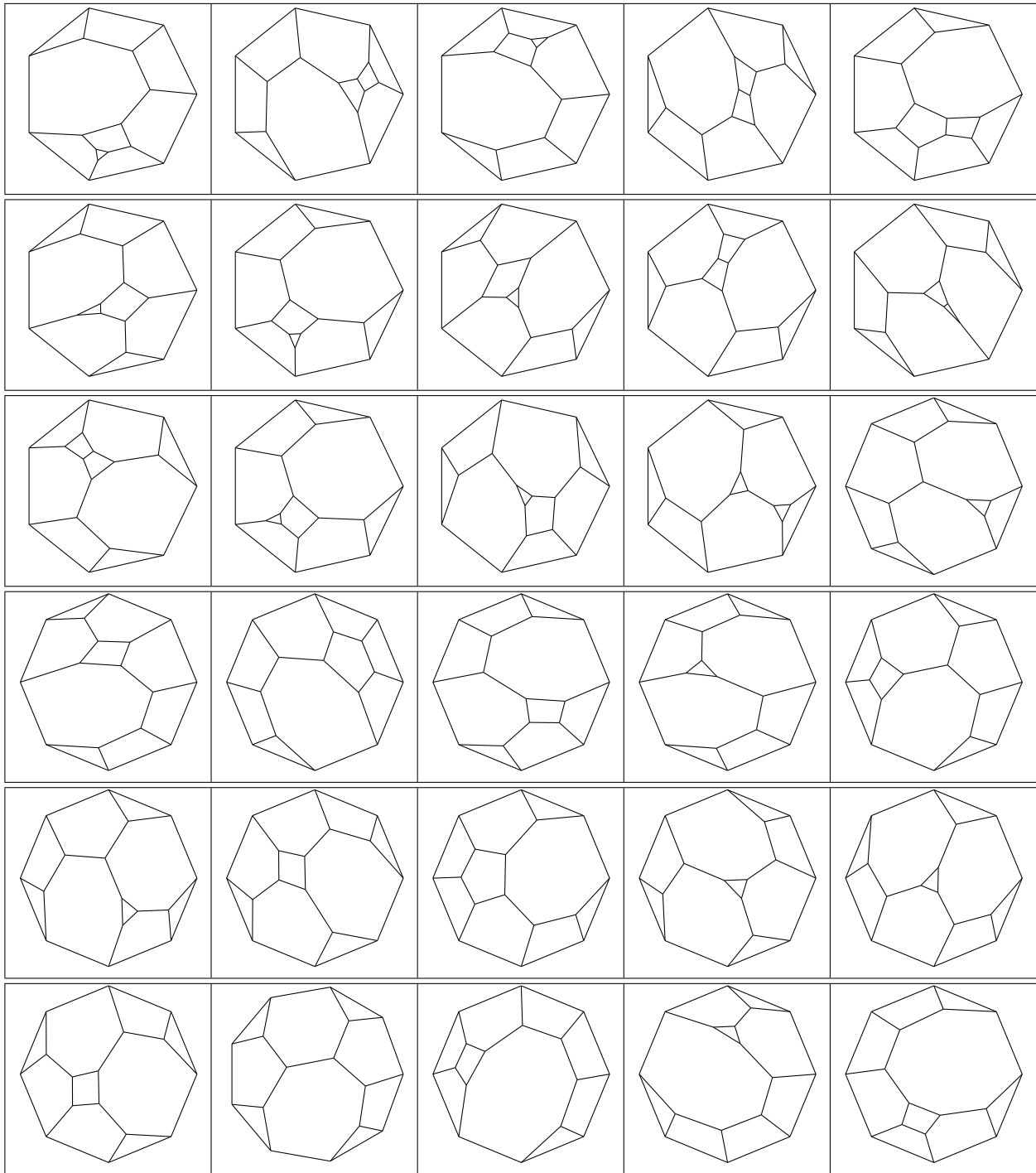


Figure 12: Simple Polyhedra with 10 Faces (continued)

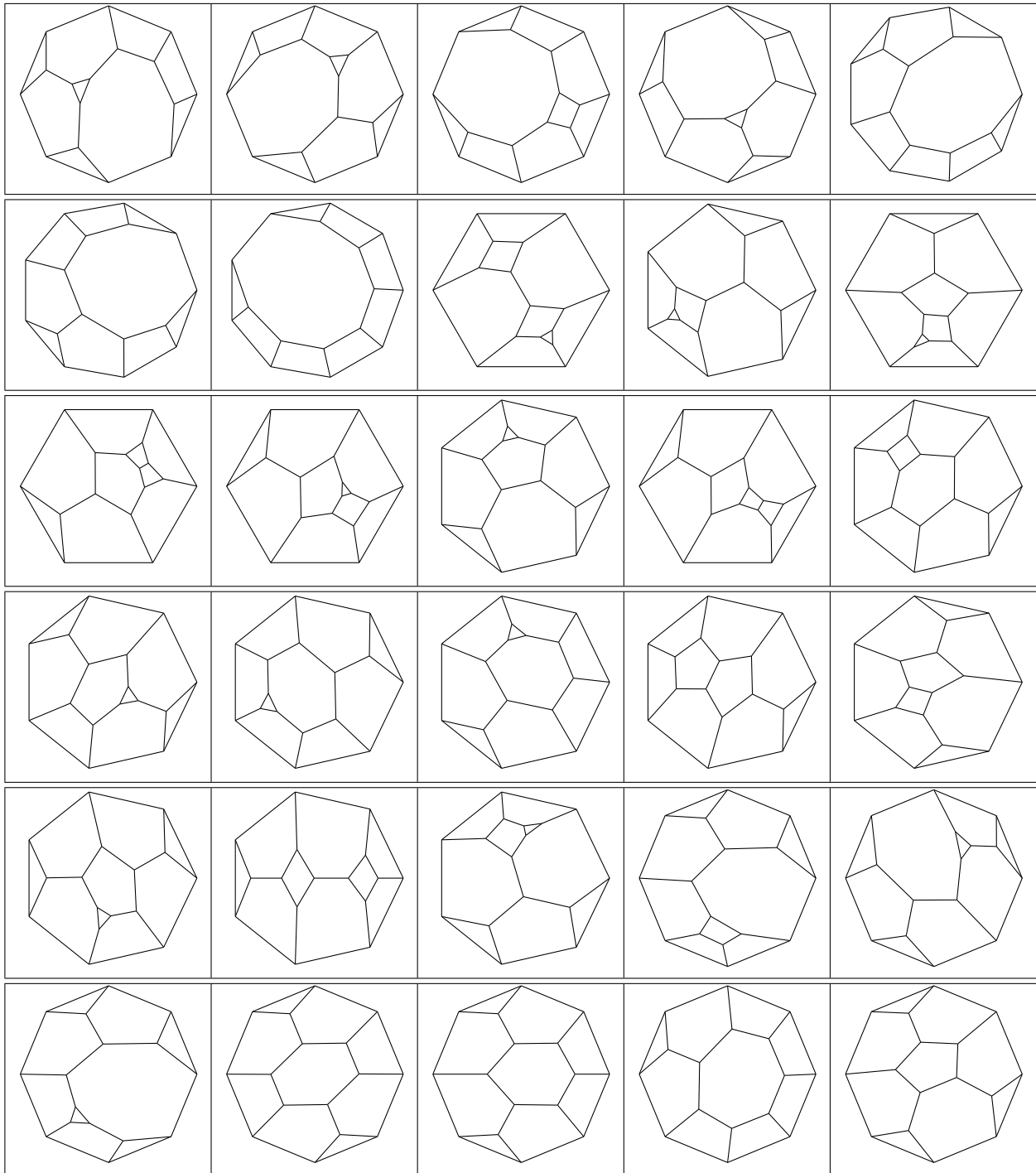


Figure 13: Simple Polyhedra with 10 Faces (continued)

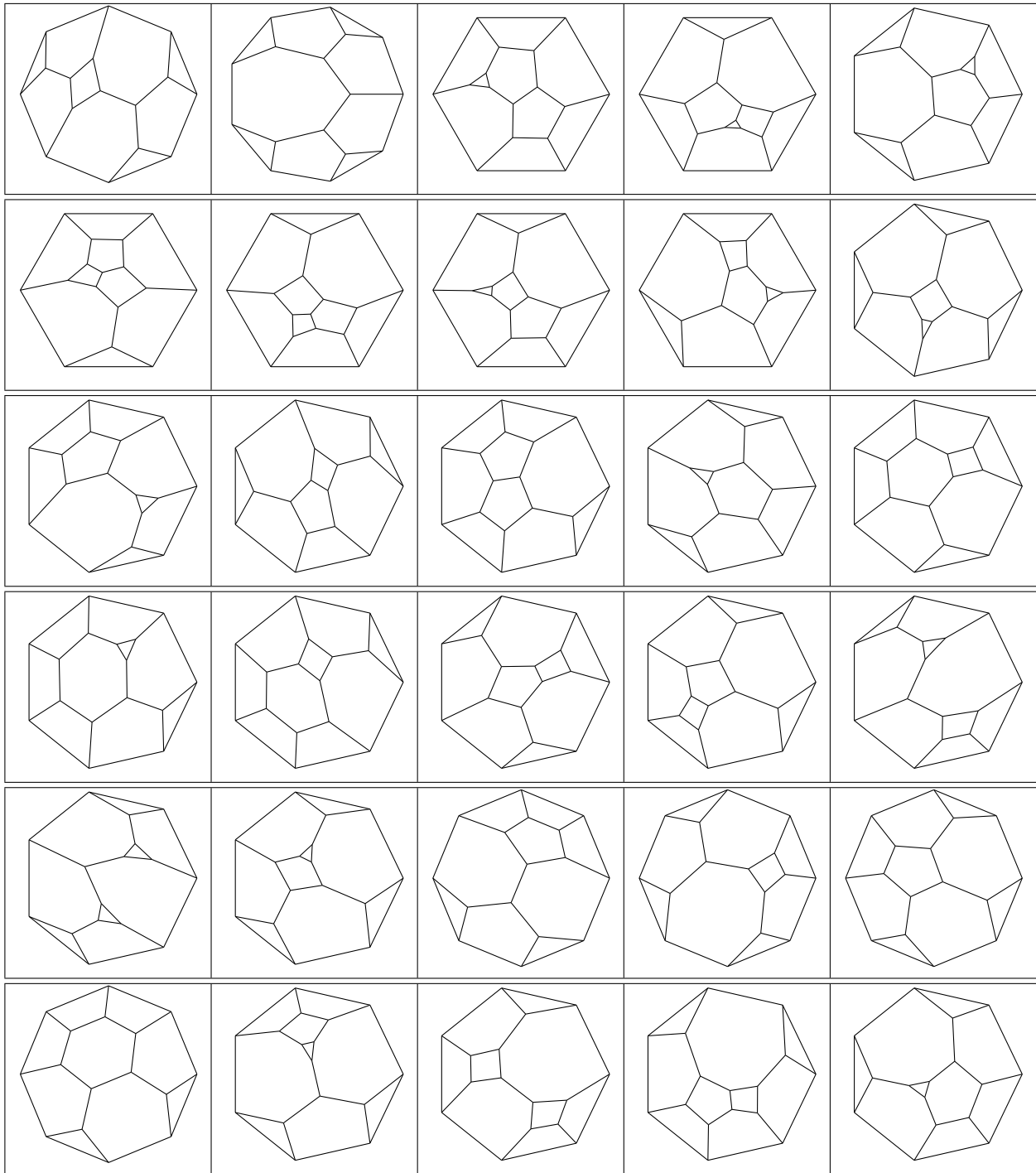


Figure 14: Simple Polyhedra with 10 Faces (continued)

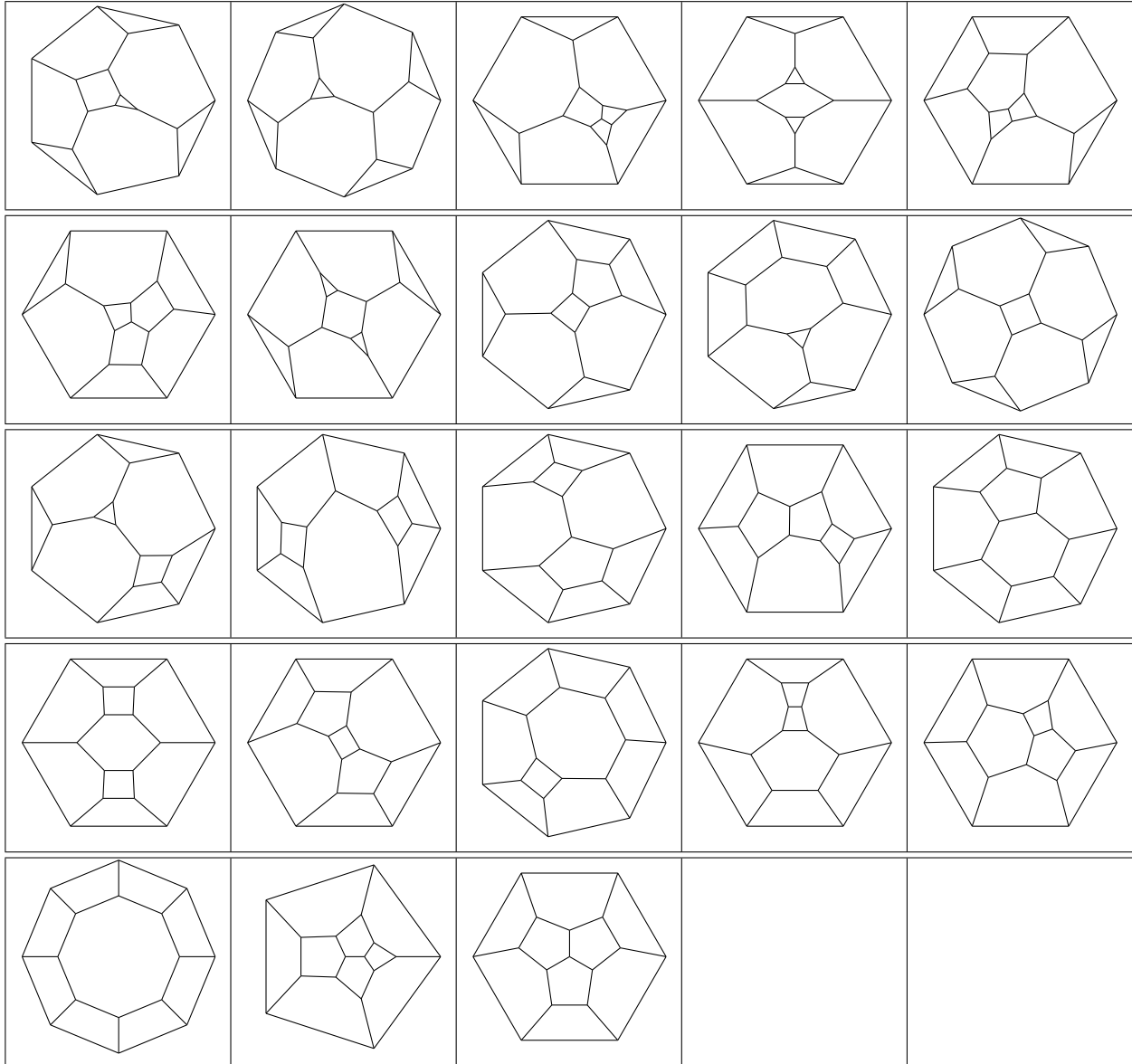


Figure 15: Simple Polyhedra with 10 Faces (continued)