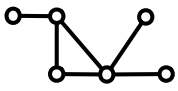
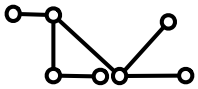
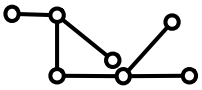
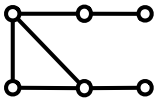
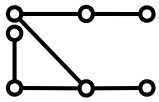
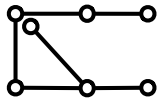
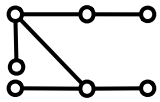
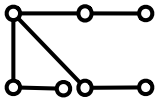
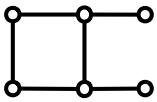
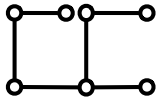
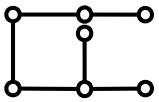
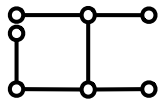
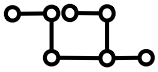
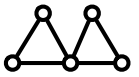
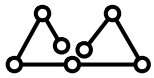
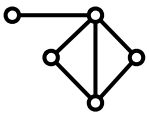
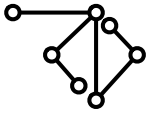
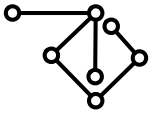
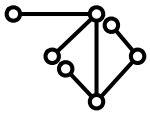
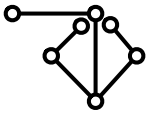
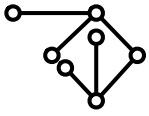
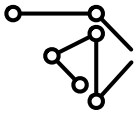
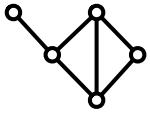
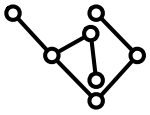
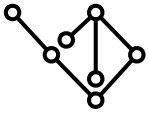
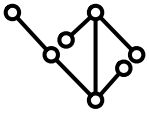
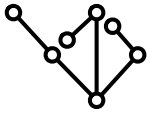
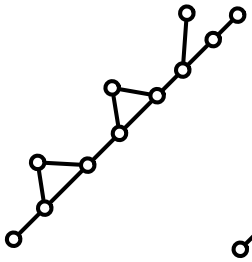
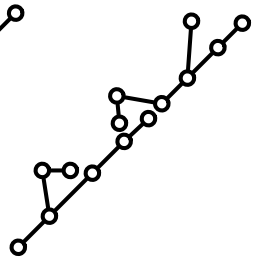
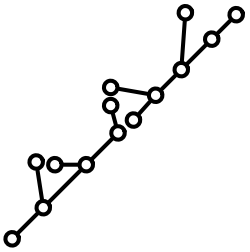
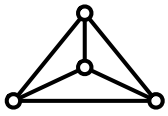
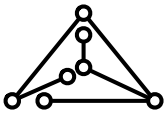
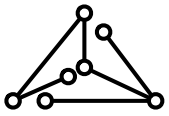
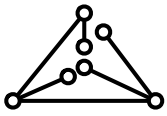
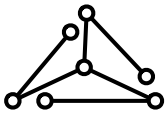
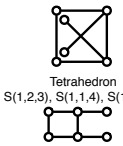
Modules for six-edge trees

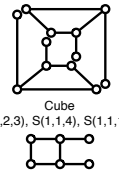
The edge sets of all Platonic and Archimedean solids,
all regular and Archimedean or semiregular tilings are decomposable by *S*(1,2,3).
These diagrams demonstrate decomposition by *S*(1,2,3), but decompositions by other trees
are possible for some of the polyhedra or tilings.

Type	*S*(1,2,3)	*S*(1,1,4)	*S*(1,1,1,2)	*S*(2,2,2)	*S*(1,1,1,1)	*P*(6)
		NO		NO		NO
					NO	NO
				NO	NO	NO
		NO	NO	NO		NO
		NO	NO	NO	NO	
						
					NO	NO
		NO		NO	NO	NO
					NO	NO

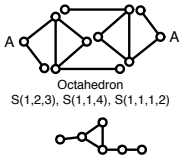
Platonic Solids



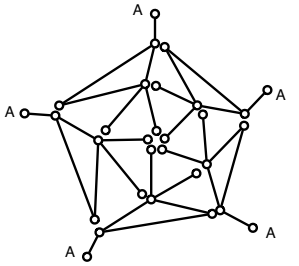
Tetrahedron
S(1,2,3), S(1,1,4), S(1,1,1,2)



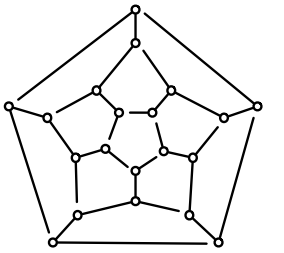
Cube
S(1,2,3), S(1,1,4), S(1,1,1,2)



Octahedron
S(1,2,3), S(1,1,4), S(1,1,1,2)

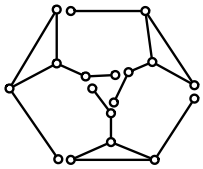


Icosahedron
S(1,2,3), S(1,1,4), S(1,1,1,1)

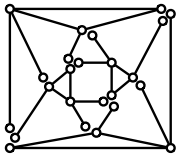


Dodecahedron
Only S(1,2,3)

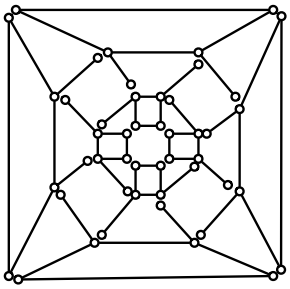
Archimedean Solids



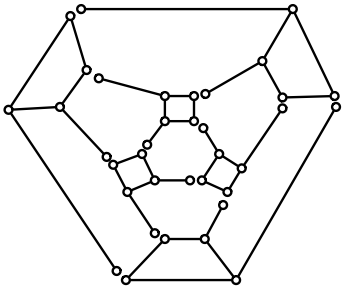
Truncated Tetrahedron
S(1,2,3), S(1,1,4), S(1,1,1,2)



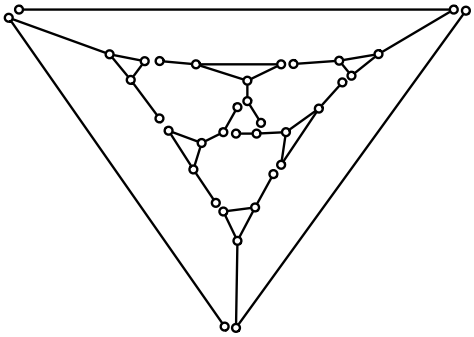
Cuboctahedron
S(1,2,3), S(1,1,1,1), S(1,1,1,2)



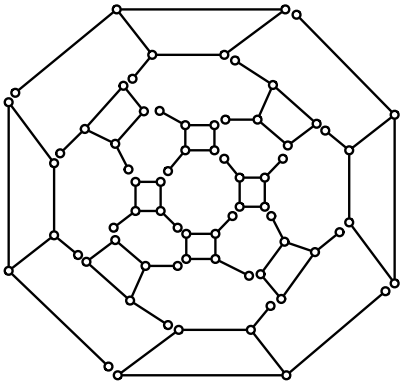
Rhombicuboctahedron
S(1,2,3), S(1,1,4), S(1,1,1,2)



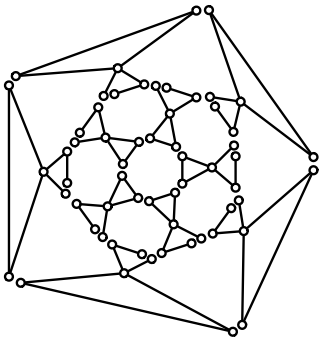
Truncated Octahedron
S(1,2,3), S(1,1,4), S(1,1,1,2)



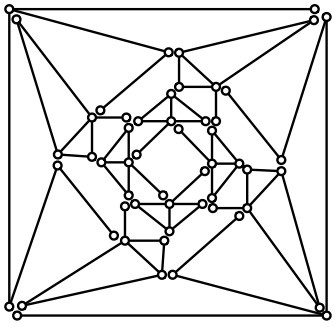
Truncated Cube
S(1,2,3), S(1,1,4), S(1,1,1,2)



Truncated Cuboctahedron
S(1,2,3), S(1,1,4), S(1,1,1,2)

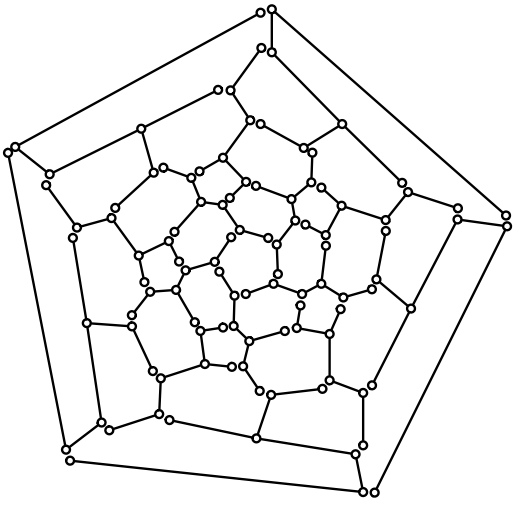


Icosadodecahedron
S(1,2,3) and P(6)

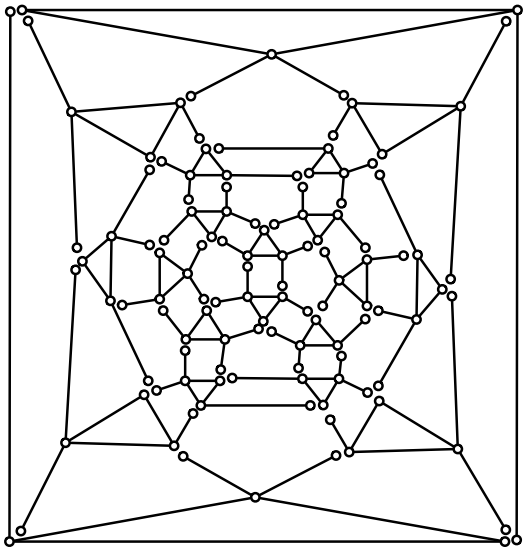


Snub Cube
S(1,2,3)

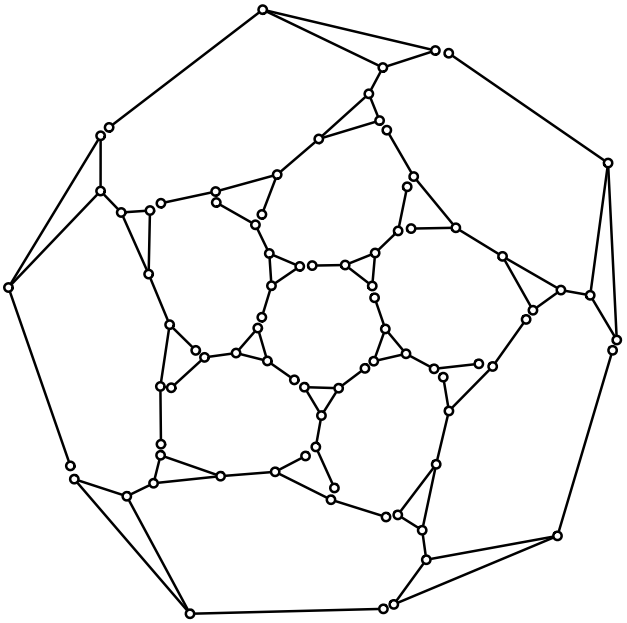
and



Truncated Icosahedron
S(1,2,3)

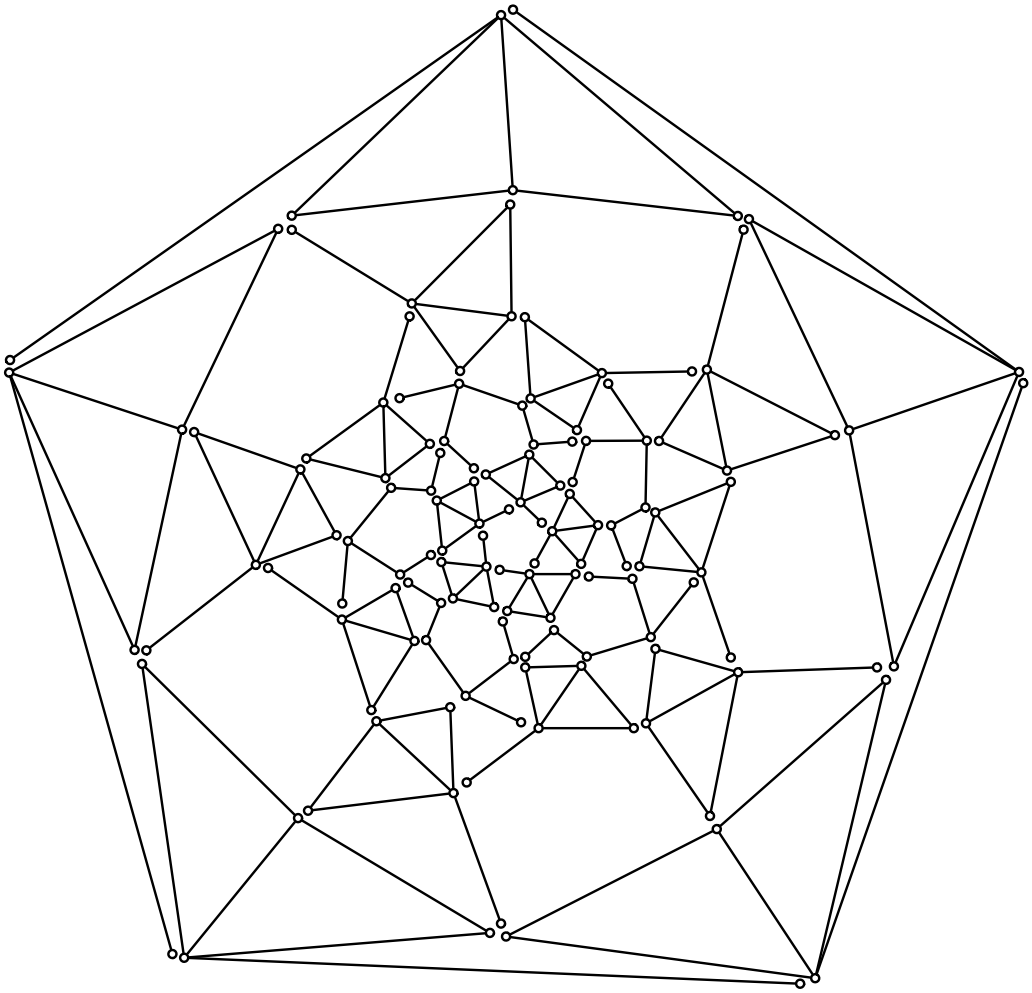


Rhombicosadodecahedron
S(1,2,3), S(1,1,1,1), S(1,1,1,2)



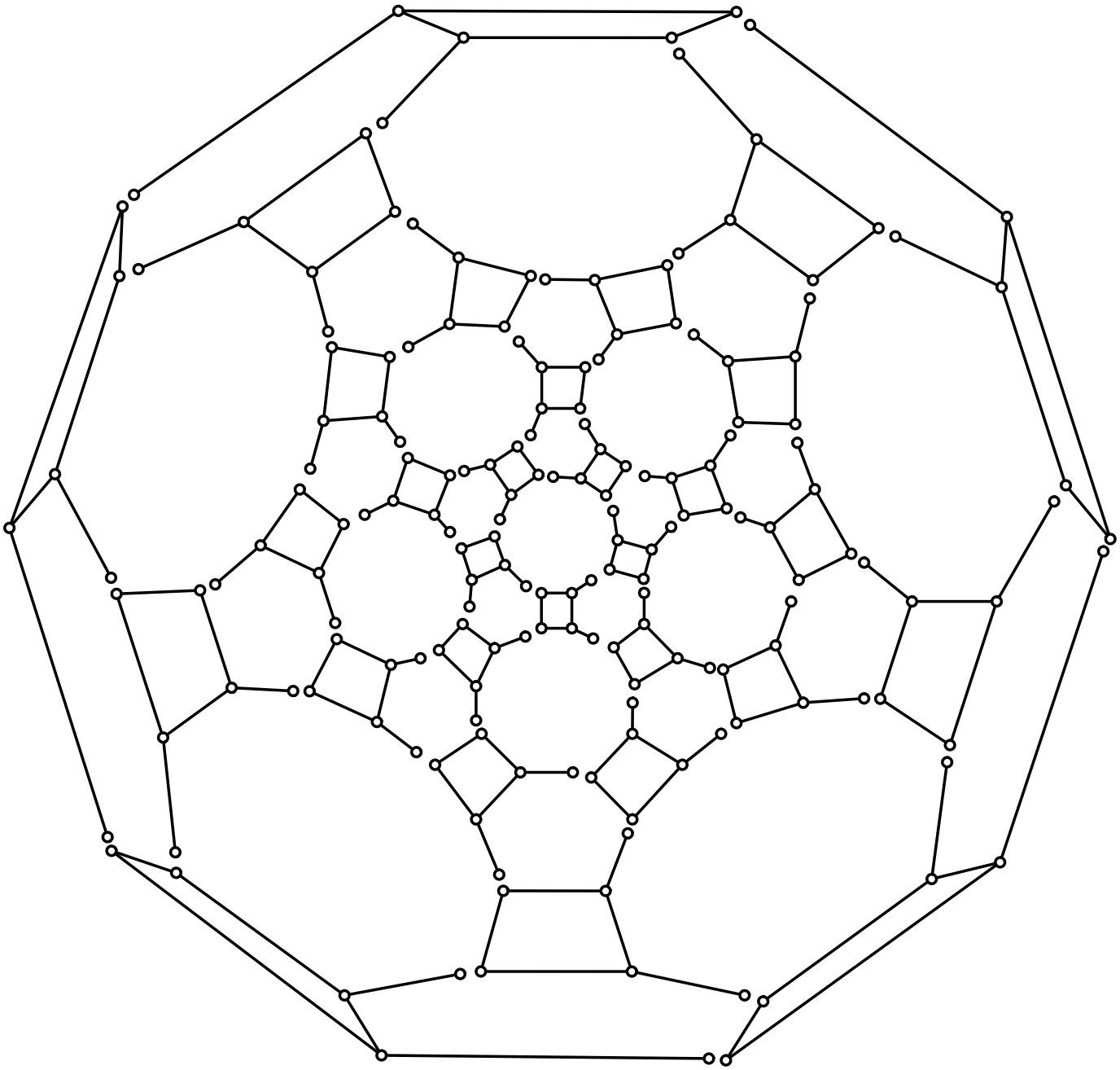
Truncated Dodecahedron
S(1,2,3) and S(1,1,1,2)

and

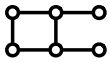


Snub Dodecahedron
S(1,2,3)

and

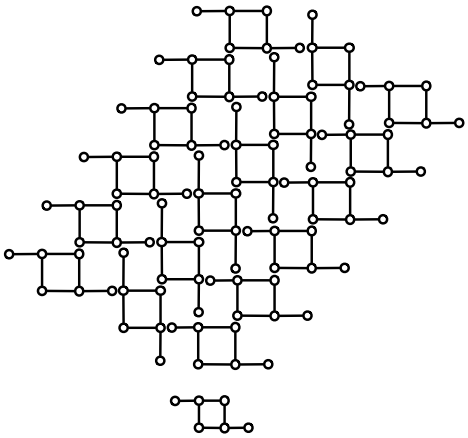


Truncated Icosadodecahedron
S(1,2,3), S(1,1,4), S(1,1,1,2)

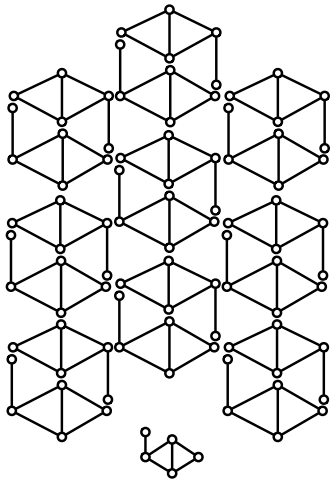


Regular Tessellations

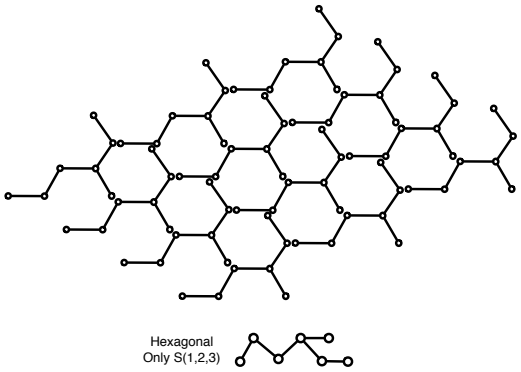
(No maximum decomposing figure since patterns have translation symmetries)



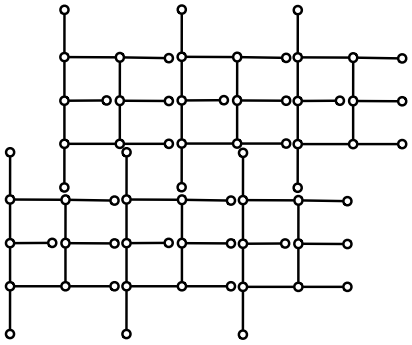
Square
S(1,2,3) and S(1,1,1,1)

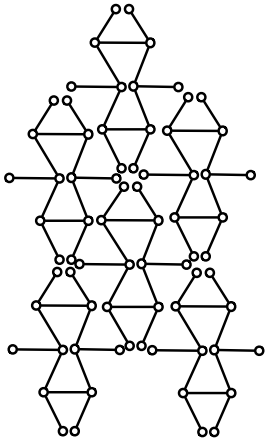


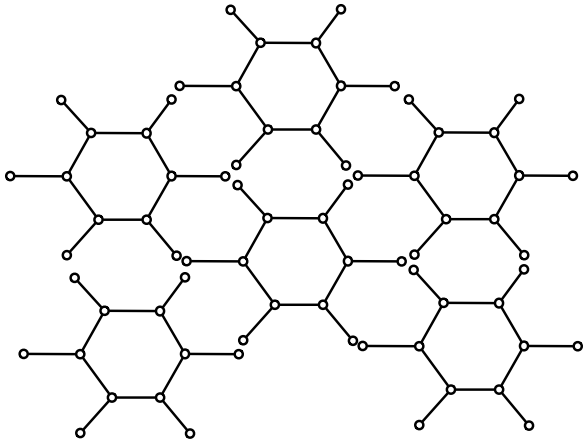
Triangular
S(1,2,3), S(1,1,4), S(1,1,1,2)

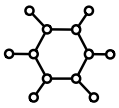


Hexagonal
Only S(1,2,3)





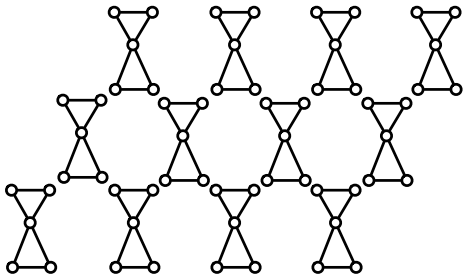




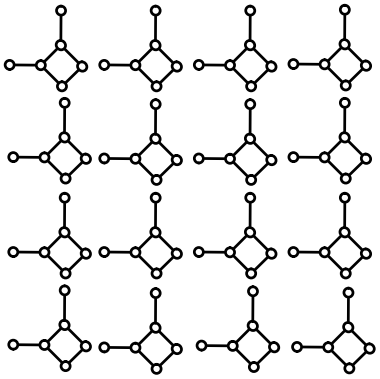
Hexastar

Archmedean or Semiregular Tessellations

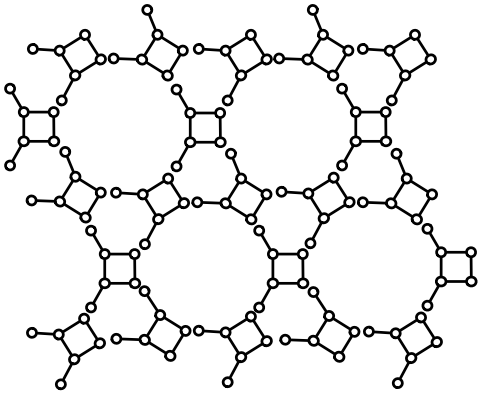
(No maximum decomposing figure since patterns have translation symmetries)



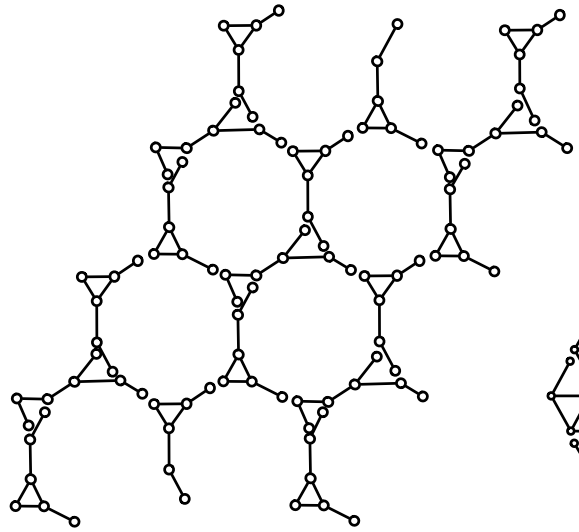
Trihexagonal, 3.6.3.6
S(1,2,3) and P(6)



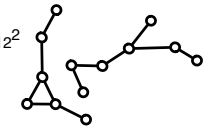
Truncated square, 4.8^2
S(1,2,3), S(1,1,4), and S(1,1,1,2)

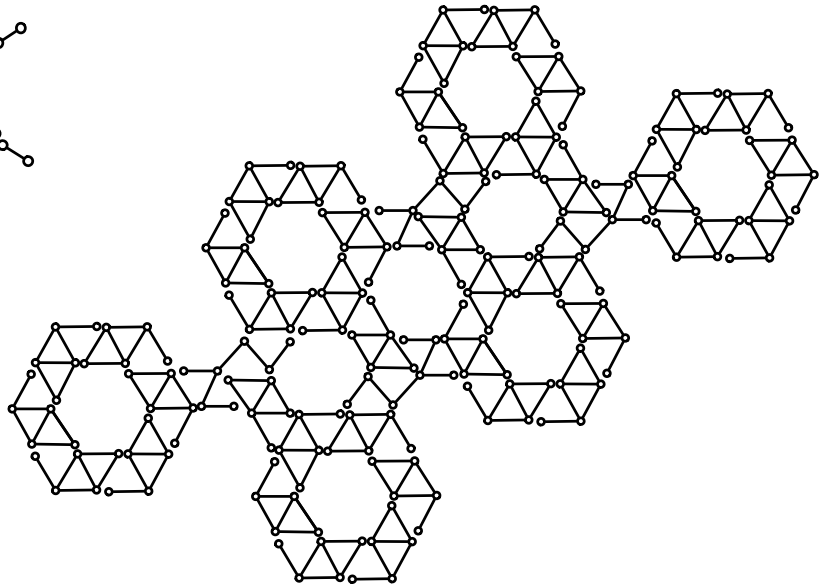


Truncated trihexagonal, 4.6.12
S(1,2,3), S(1,1,4), and S(1,1,1,2)

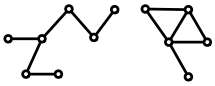


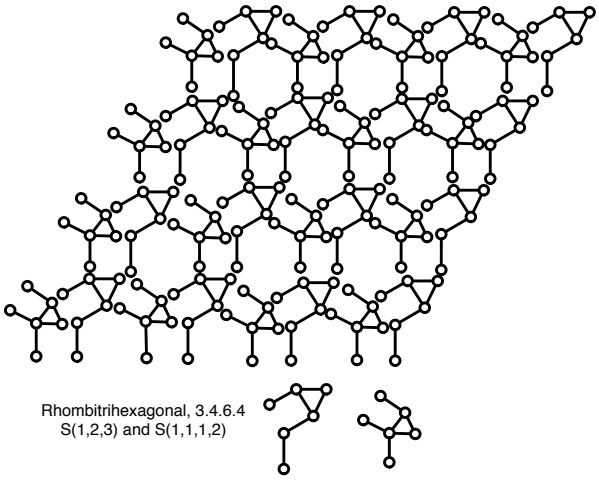
Truncated hexagonal, 3.12^2
S(1,2,3)



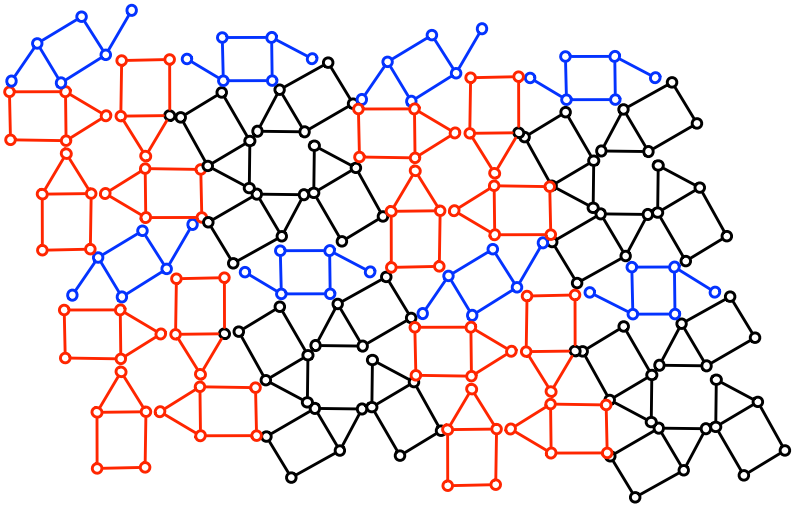


Snub hexagonal, $3^4.6$
S(1,2,3)

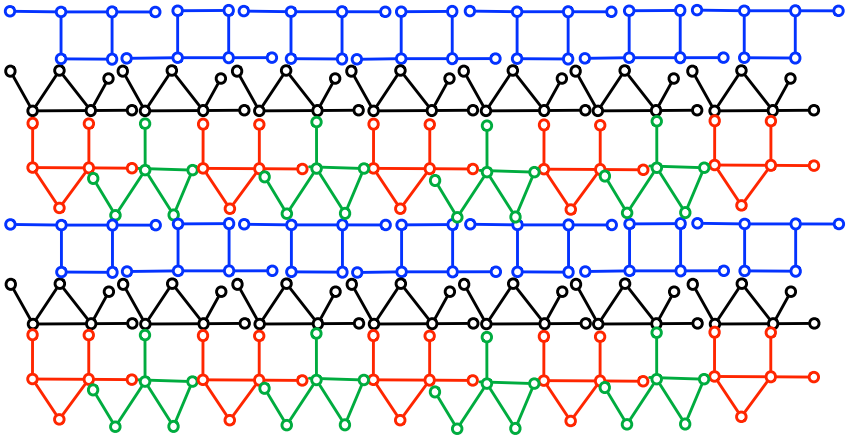




Rhombitrihexagonal, 3.4.6.4
S(1,2,3) and S(1,1,1,2)



Snub square, $3^2.4.3.4$
S(1,2,3)



Elongated triangular, $3^3.4^2$
S(1,2,3) and S(1,1,1,2)