Showing combinations of the 3rd $\frac{\pi}{5}$ rotation of the H4Φ snub 24-Cell with various Platonic solid related hulls of the H4 and H4Φ 600-Cells which make up the 240 vertex locations of E8. The one shown below is the smallest of the hulls - the H4 Icosahedron (1a) hull:
The one shown below is the H4 Dodecahedron (2b) hull:
The one shown below is one of four combined H4 and H4Φ Icosahedron (3d) hull:
The one shown below is the largest of the H4 hulls - the Icosidodecahedron (4) hull:
The one shown below is the H4Φ Dodecahedron (5b) hull:
The one shown below is the H4Φ Icosahedron (6b) hull:

Show \{15, 16, 32, 97, 145, 157, 100, 242\}
The one shown below is the largest hull - the H4Φ Icosidodecahedron (7) hull: