

```
Here is again the bound of the possible vertex figures

#vert 4 5 6 7 8 9 10 11 12 13
#face 1 2 7 33 249 2473 29846 394498 5528006 79919023 <- sum
#face 4 1 1
5 2 1 1
6 7 1 2 2 2
7 25 2 7 9 5 2
8 149 2 11 39 55 35 7
9 944 8 71 248 379 235 3
10 ^ 5 76 590 1976 2930 389
11 | 38 748 5290 16401 11684 3
12 sum 14 558 8309 50226 109398 409
13 219 7776 91966 449409 15892
14 50 4442 106558 1008926 213923
15 1404 78684 1400693 1296312
16 233 36528 1282828 4157926
17 9714 780953 7698651
18 1249 306470 8609942
19 70454 5875223
20 7595 2384890

and here are the vertex figures which are found in the uniform polyhedra

#vertic 4 5 6 7 8 9 10 11 12
#faces 4 1
5 1 1
6 1 1 1
7 1 1
8 1 1
9 1
10 1
11 1
12 1
13 1
14 1
15 1
16 1
17 1
18 1
19 1
20 1

vertex figures of the diminished 600-cell:

#vertic 4 5 6 7 8 9 10 11 12
#faces 4
5
6 2 2 1
7 2 2 3 1
8 1 2 2
9 1 2
10 1 2
11 1
12 1
13 1
14 1
15 1
16 1
17 1
18 1
19 1
20 1

truncating the pentagonal prism vertex figure

#vert 4 5 6 7 8 9 10
#faces 4
5 1
6 1 1 1
7 1 2 1 1
8 1 2 1 1
9 1 2
```

```
truncating the square antiprismatic vertex figure

#vert 4 5 6 7 8 9 10 11 12 13
#faces 4 1
5 1 1
6 1
7 1 1
8 1 1
9 1
10 1

truncating the cubic vertex figure

#vert 4 5 6 7 8
#faces 4
5 1 1
6 1 1 1
7 1 1 1
8 1 1 1

Summary of all the vertex figures I yet

#vertic 4 5 6 7 8 9 10 11 12
#faces 4 1
5 1 1
6 1 2 2 2
7 2 2 1 1 <- pentagonal prism
8 2 2 3 1
9 1 1 1 1
10 1 2 2 1
11 . . 1 2 <- there seems to be a
12 . . . 2 restriction which
13 . . . 1 I do not understand
14 . . 1 1
15 . . . 1
16 boundary from deltahedra -> . . 1
17 . . . 1
18 . . . 1
19 . . . 1
20 . . . 1
```