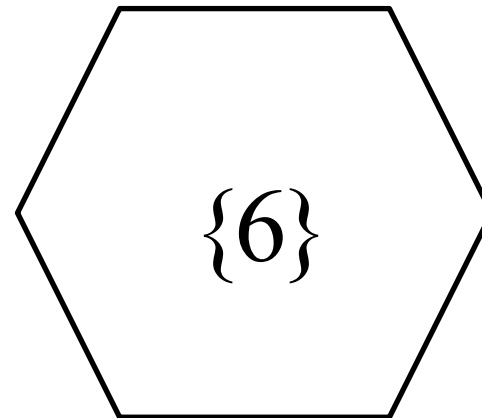
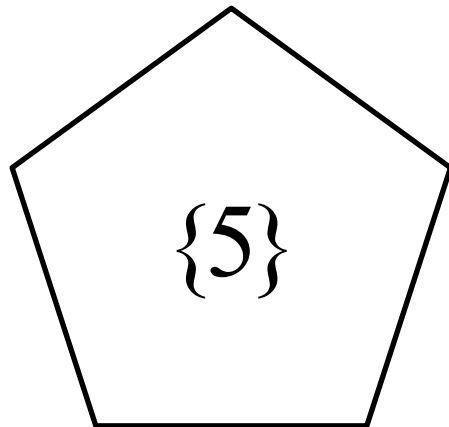
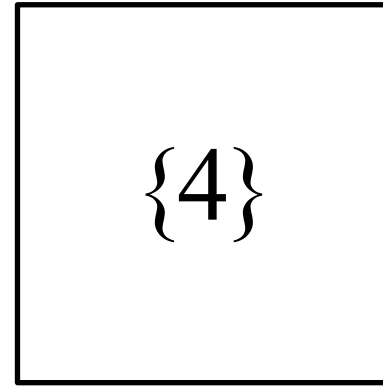
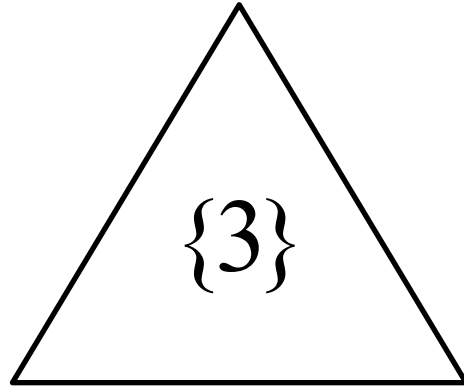


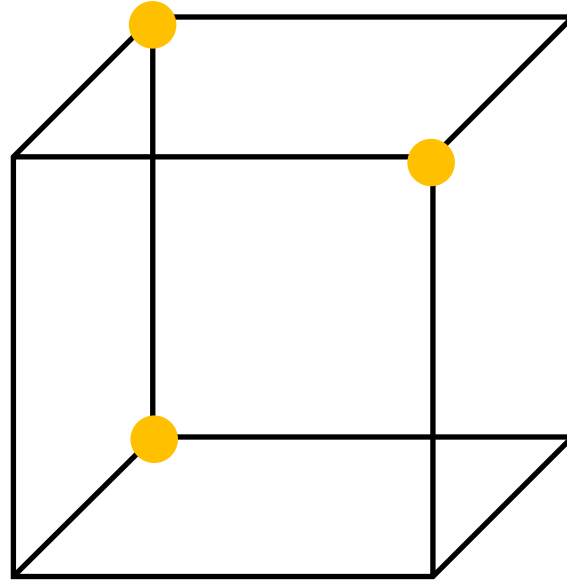
Solides de Platon

Christian Côté

Dimension 2

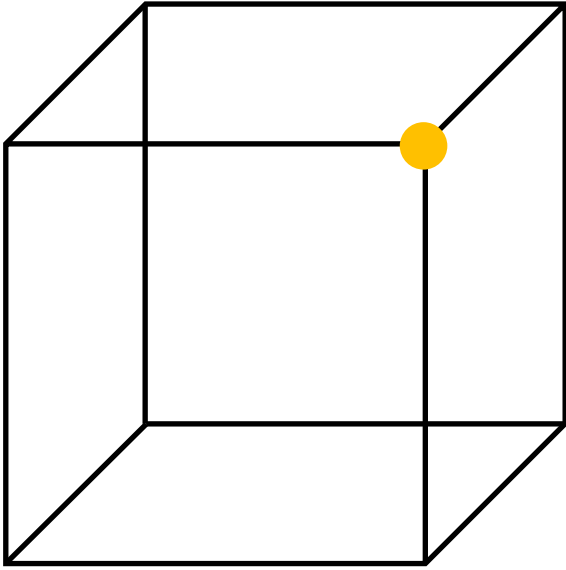


Dimension 3

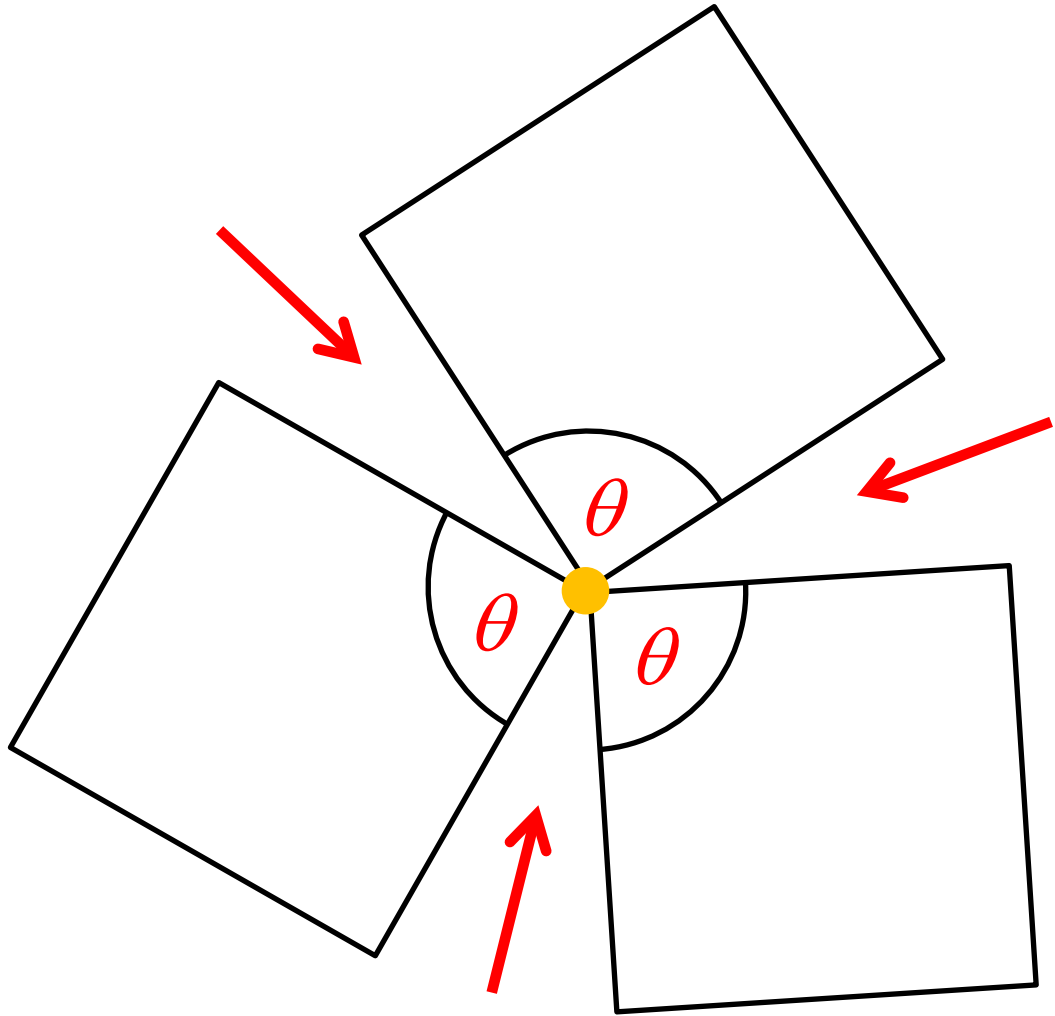


$$\left\{ \begin{array}{l} \text{Nombres de} \\ \text{Face, faces autour} \\ \text{d'un sommet} \end{array} \right\} = \{4, 3\}$$

$$\{p, q\} = \{?, ?\}$$



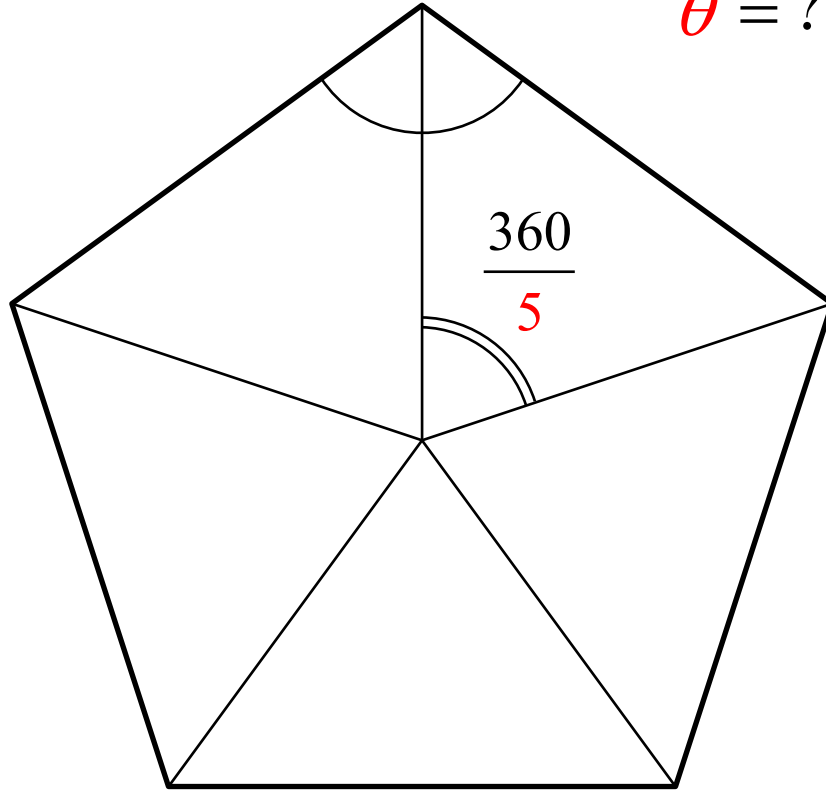
$\{4, 3\}$



$$3\theta < 360$$

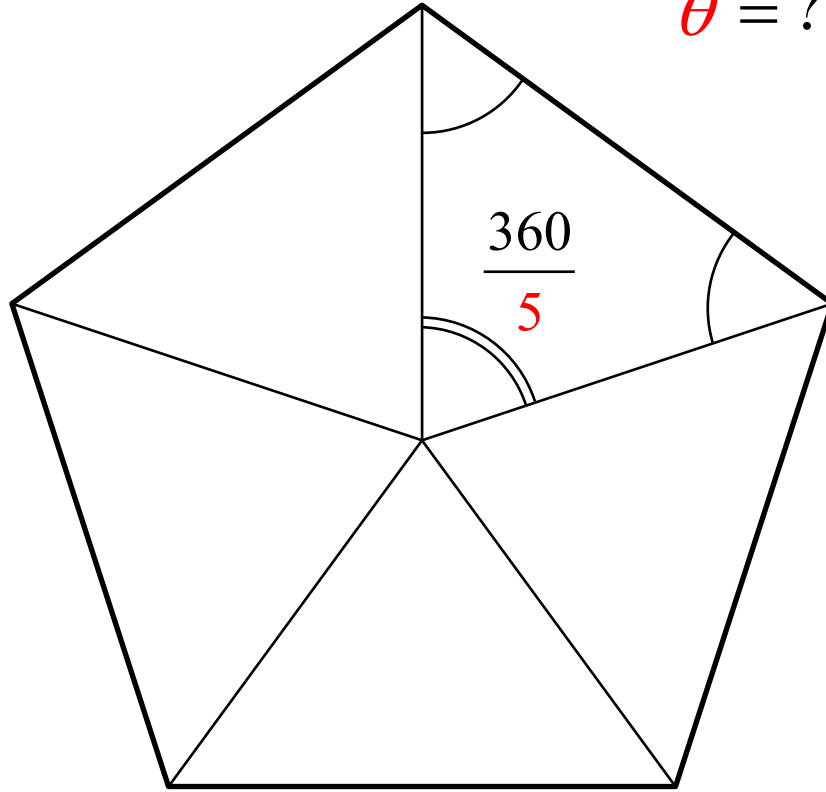
$\{5\}$

$\theta = ?$



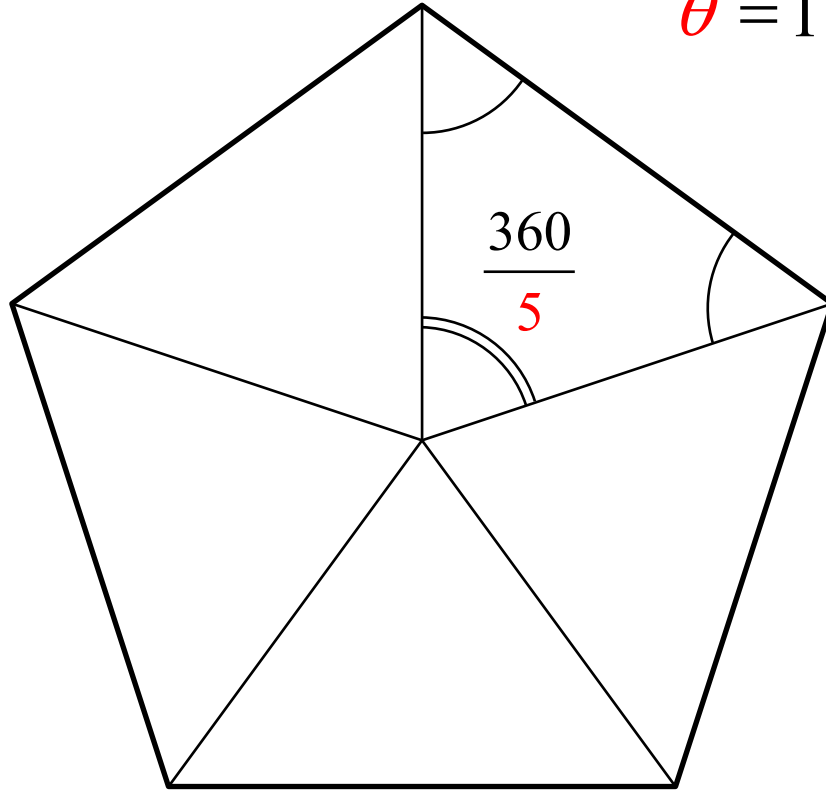
$\{5\}$

$\theta = ?$



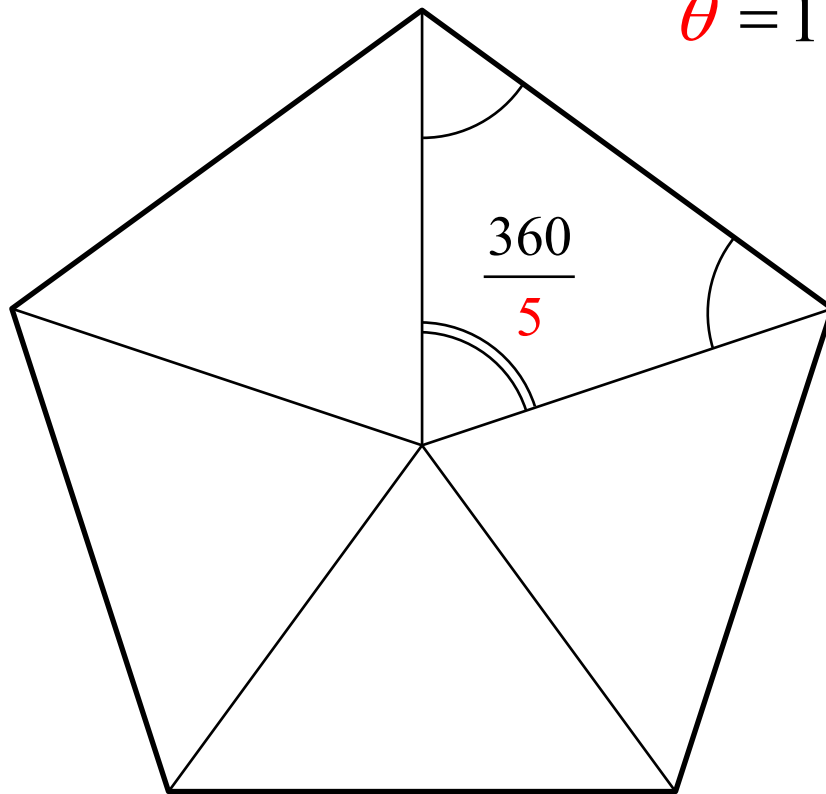
$\{5\}$

$$\theta = 180 - \frac{360}{5}$$



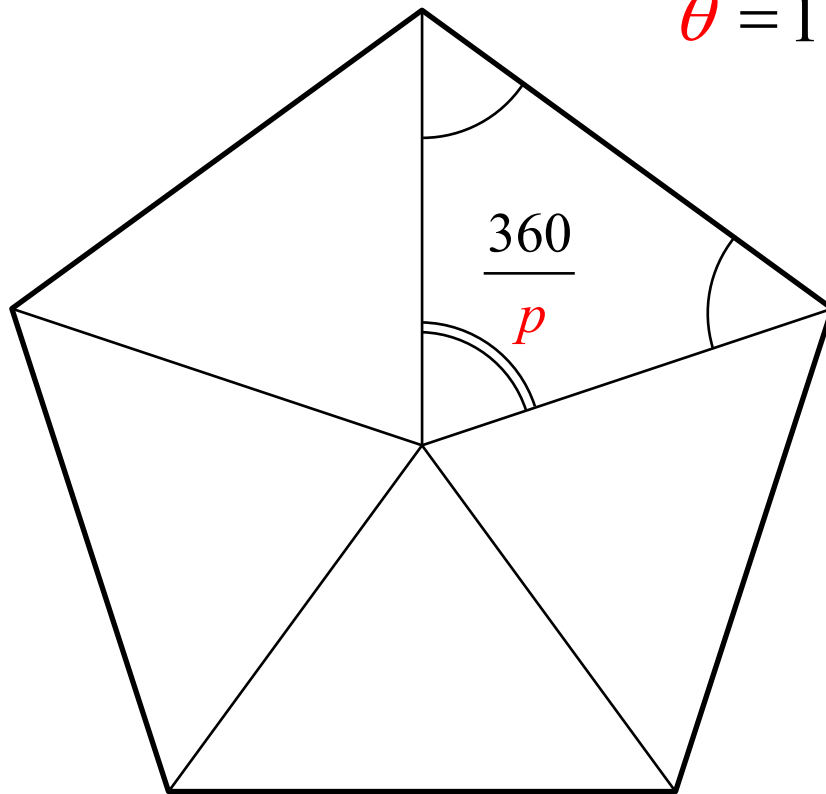
$\{p\}$

$$\theta = 180 - \frac{360}{5}$$



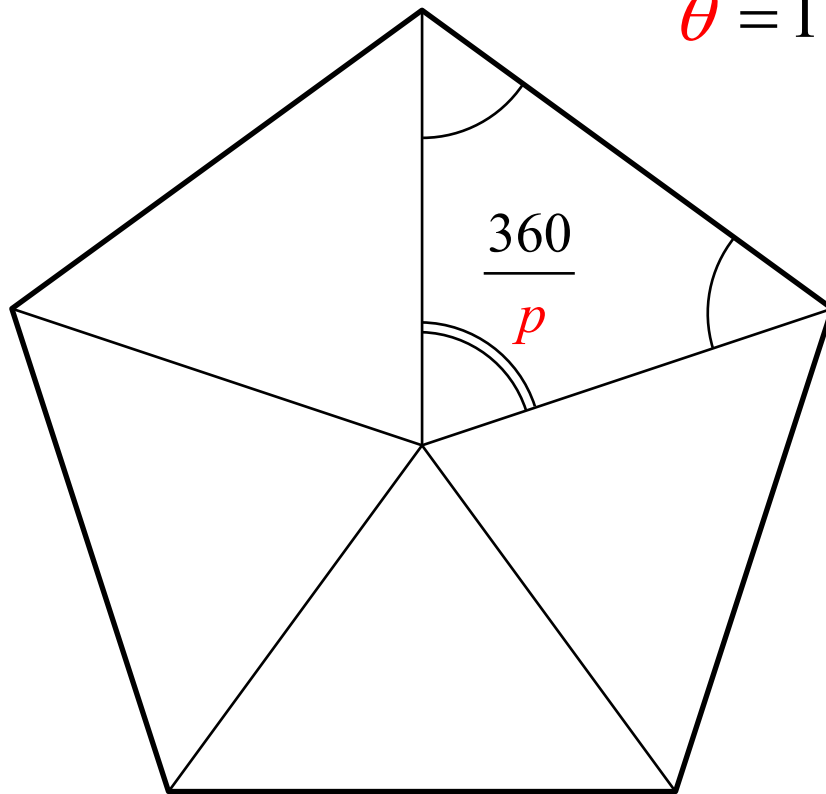
$\{p\}$

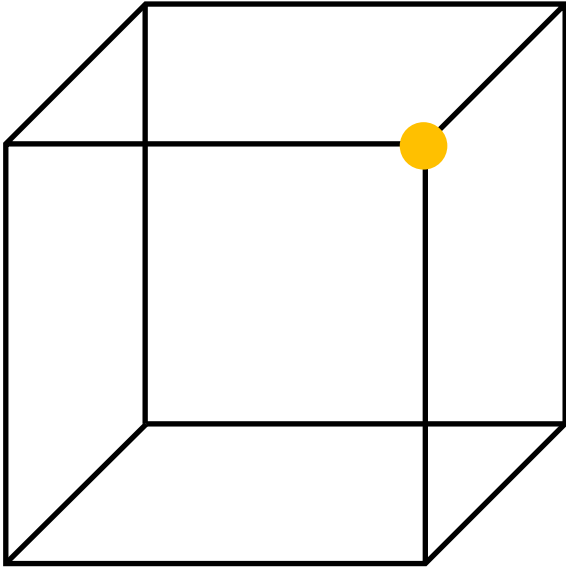
$$\theta = 180 - \frac{360}{5}$$



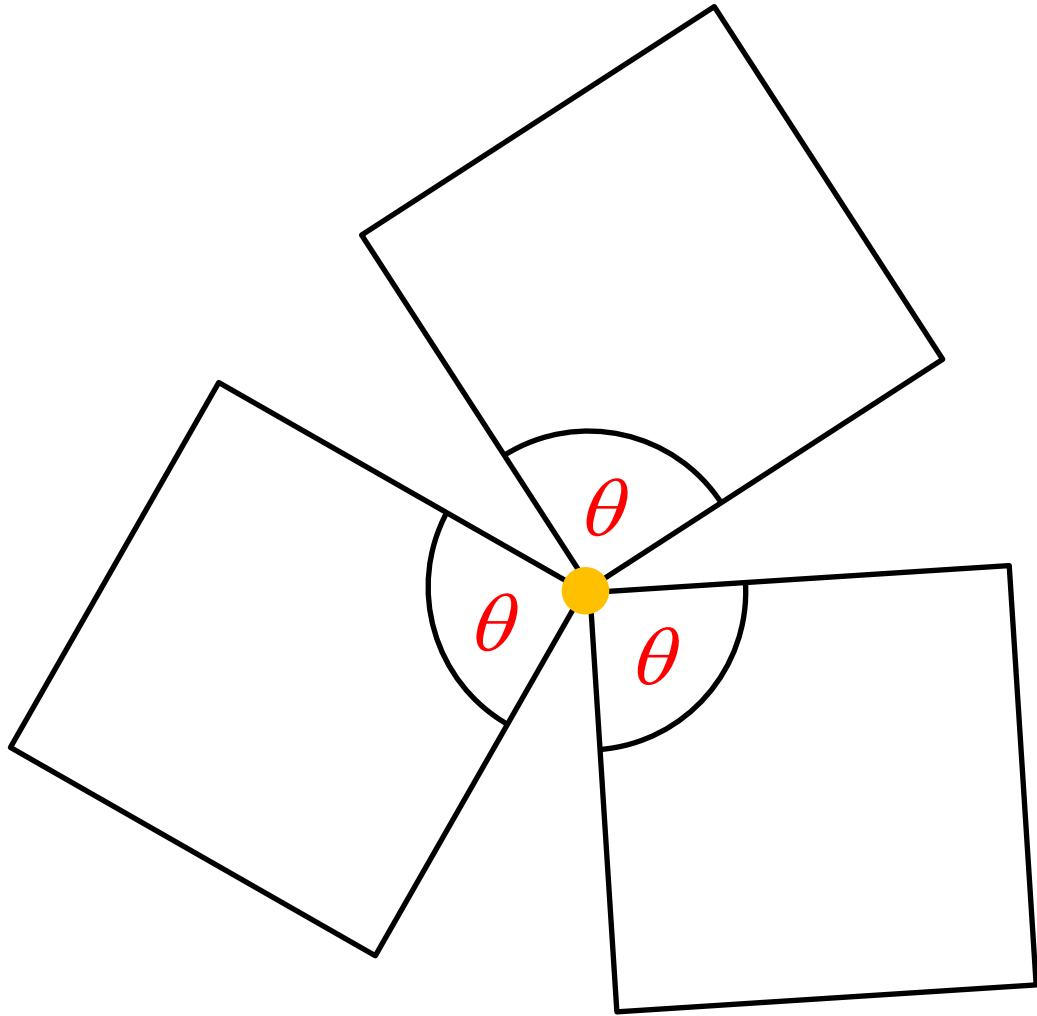
$\{p\}$

$$\theta = 180 - \frac{360}{p}$$

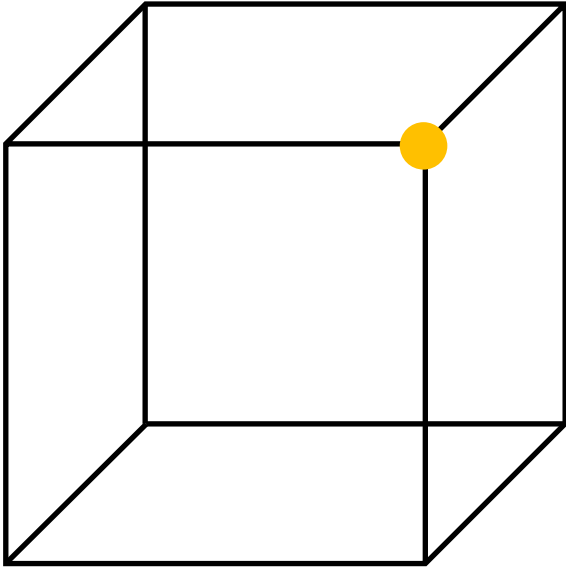




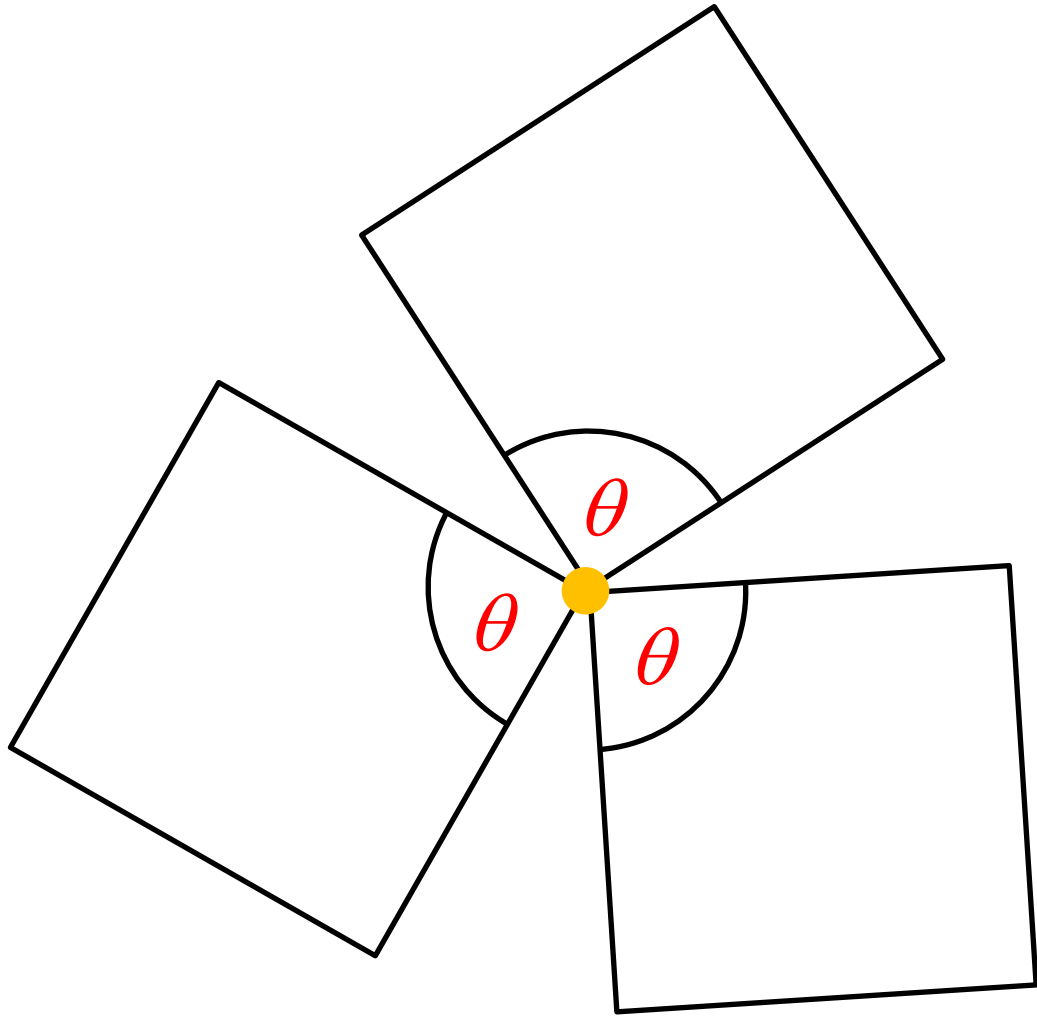
$\{4, 3\}$



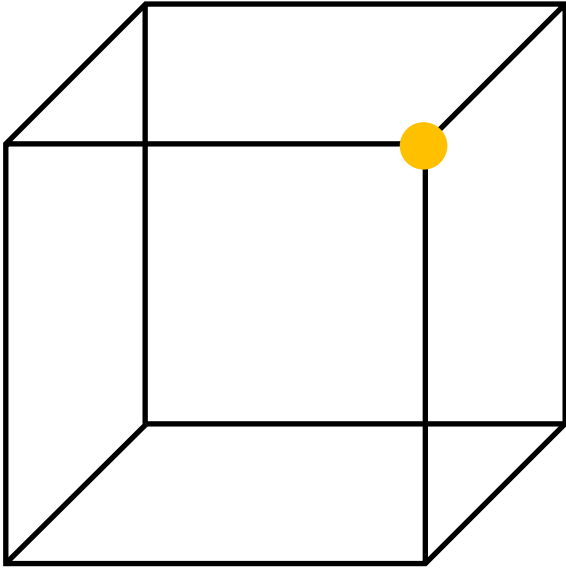
$$3\theta < 360$$



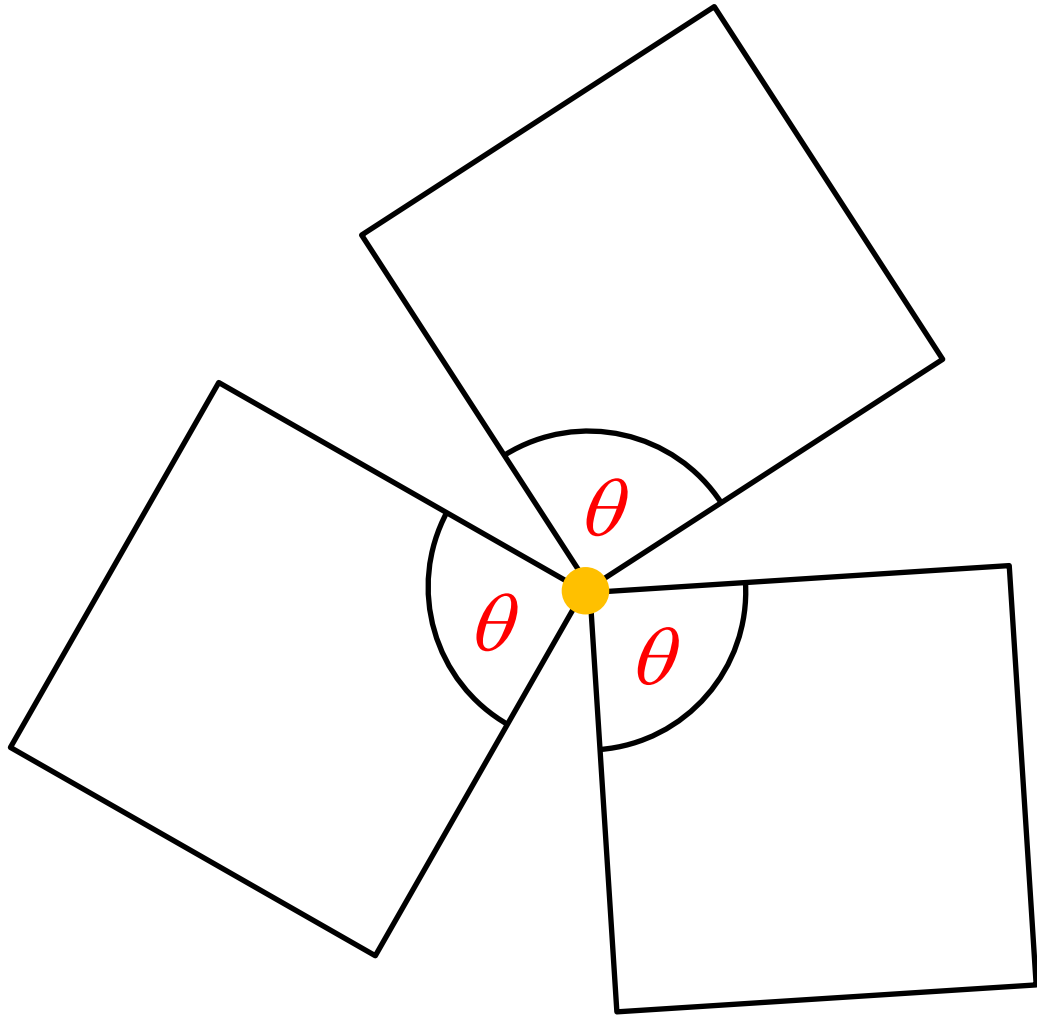
$$\{4, q\}$$



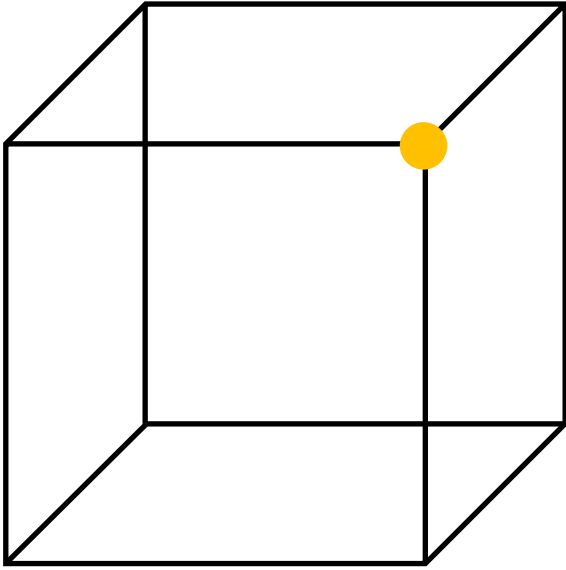
$$3\theta < 360$$



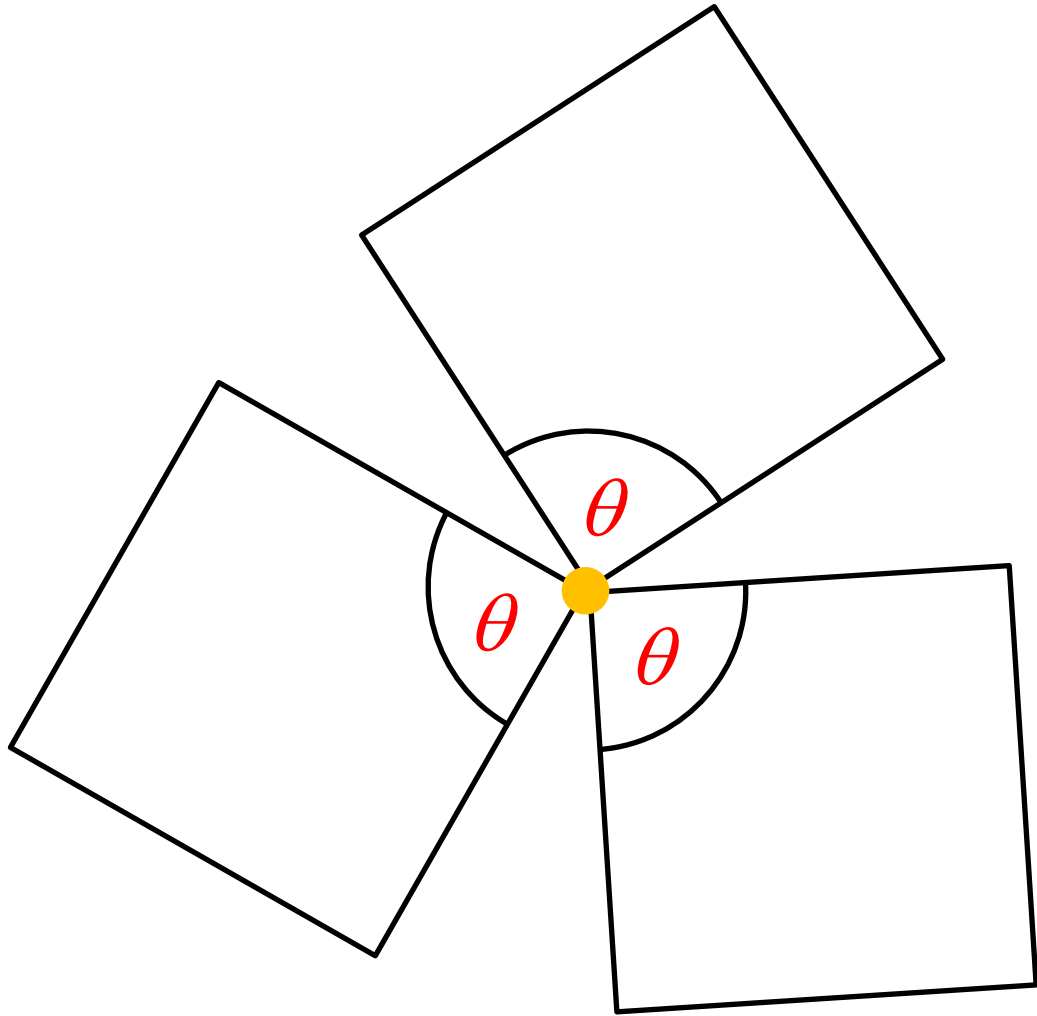
$$\{4, q\}$$



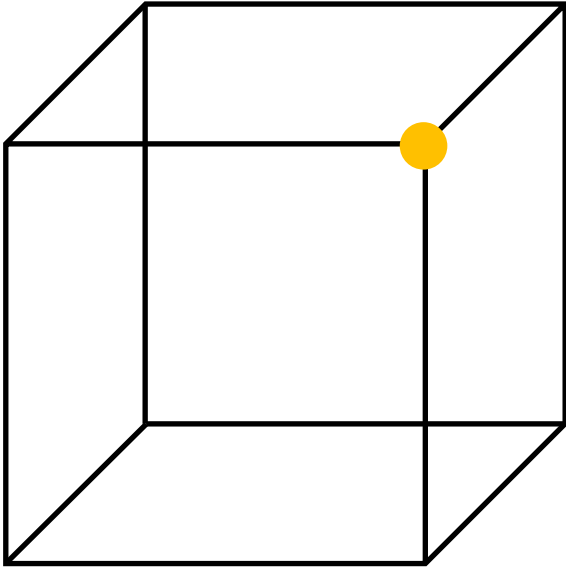
$$q\theta < 360$$



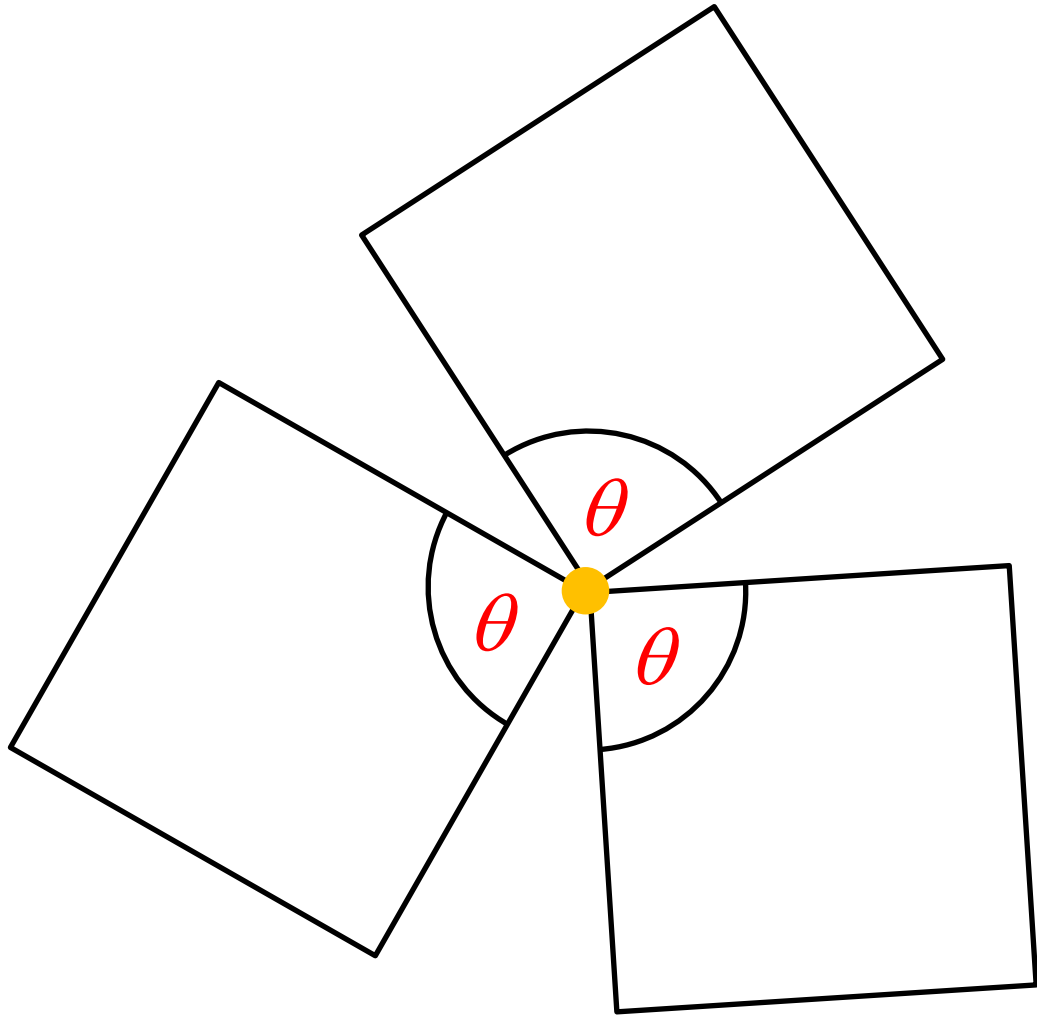
$$\{p, q\}$$



$$q\theta < 360$$



$$\{p, q\}$$



$$q \left(180 - \frac{360}{p} \right) < 360$$

$$q\left(180 - \frac{360}{p}\right) < 360$$

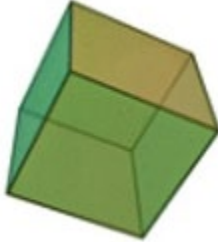
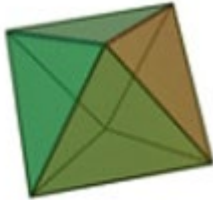
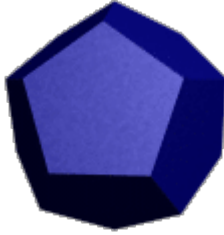
$$(p - 2)(q - 2) < 4$$

$$(p-2)(q-2) < 4$$

$\begin{array}{c} q \\ p \end{array}$	3	4	5	6
3	1	2	3	4
4	2	4	6	8
5	3	6	9	12
6	4	8	12	16

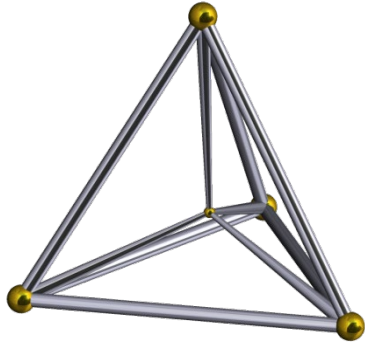
$(p-2)(q-2) < 4$

p q	3	4	5	6
3	1	2	3	4
4	2	4	6	8
5	3	6	9	12
6	4	8	12	16

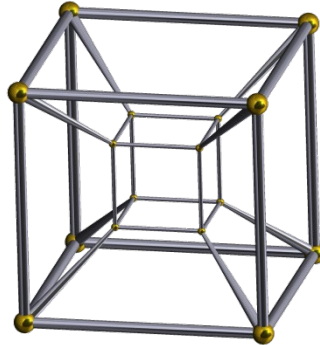
$\{3, 3\}$	$\{4, 3\}$	$\{3, 4\}$	$\{3, 5\}$	$\{5, 3\}$
				
				
Tétraèdre	Cube	Octaèdre	Icosaèdre	Dodécaèdre

Dimension 4

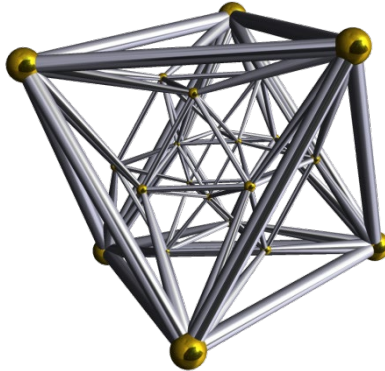
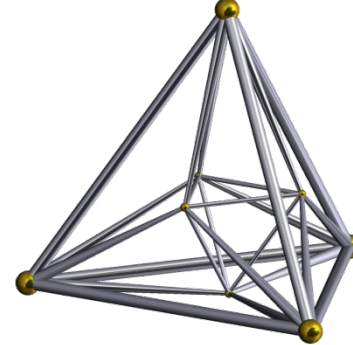
$\{3,3,3\}$



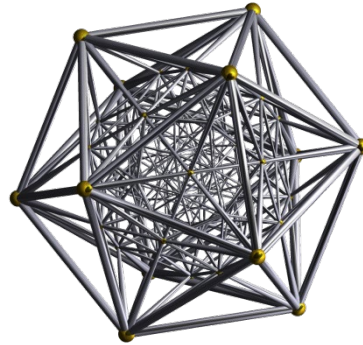
$\{4,3,3\}$



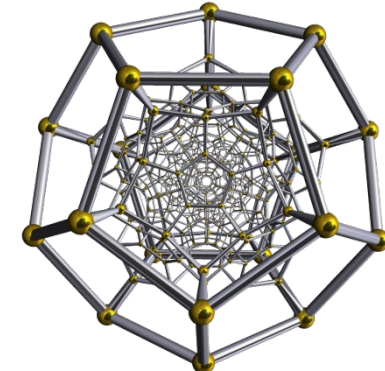
$\{3,3,4\}$



$\{3,4,3\}$



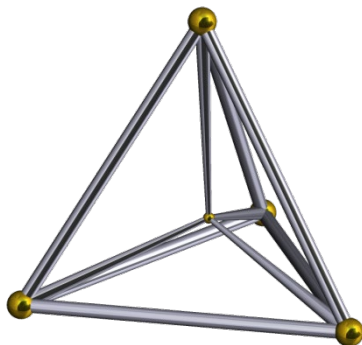
$\{3,3,5\}$



$\{5,3,3\}$

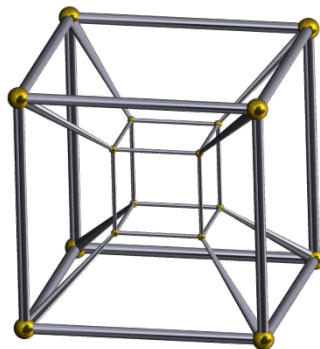
Dimension 5 et plus

$$\{3^n\}$$



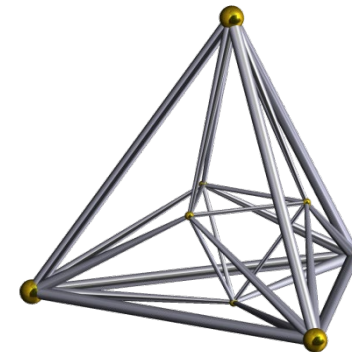
Hypertétraèdre

$$\{4, 3^{n-1}\}$$



Hypercube

$$\{3^{n-1}, 4\}$$



Hyperoctaèdre