Coordination Geometries

Geometries for <u>complete</u> coordination numbers

C.N.	Description	Bond angles $L\widehat{M}L$	
2	Linear	180°	
3	Trigonal planar	120°	
4	Tetrahedron	109.5°	
4	Square Plane	90°; 180°	
5	Square pyramid	90°; 180° $(L_{base}\widehat{M}L_{base})$ 90° $(L_{base}\widehat{M}L_{ax})$	
5	Trigonal bipyramid	$90^{\circ}\left(L_{eq}\widehat{M}L_{ax} ight) \ 120^{\circ}\left(L_{eq}\widehat{M}L_{eq} ight) \ 180^{\circ}\left(L_{ax}\widehat{M}L_{ax} ight)$	
6	Octahedron	$90^{\circ}\left(L_{eq}\widehat{M}L_{ax} ight) \ 90^{\circ}\left(L_{eq}\widehat{M}L_{eq} ight) \ 180^{\circ}\left(L_{ax}\widehat{M}L_{ax} ight)$	
6	Trigonal Prism	$\arccos\left(\frac{1}{7}\right)$ $\arccos\left(-\frac{5}{7}\right)$	