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Table 4.6 Geometry of Molecules in which the Central Atom has No Lone Pair of Electrons

Number of electron pairs	Arrangement of electron pairs	Molecular geometry	Examples
2	180° :—A: Linear	B — A—B Linear	$\mathrm{BeCl}_2,\mathrm{HgCl}_2$
3	120° Trigonal planar	B B B Trigonal planar	BF_3
4	109.5° Tetrahedral	B B B Tetrahedral	$\mathrm{CH_4}, \mathrm{NH_4}^+$
5	Trigonal bipyramidal	B B B Trigonal bipyramidal	PCl ₅
6	90° A Pyramidal 90° Octahedral	B B B B Octahedral	${ m SF}_6$