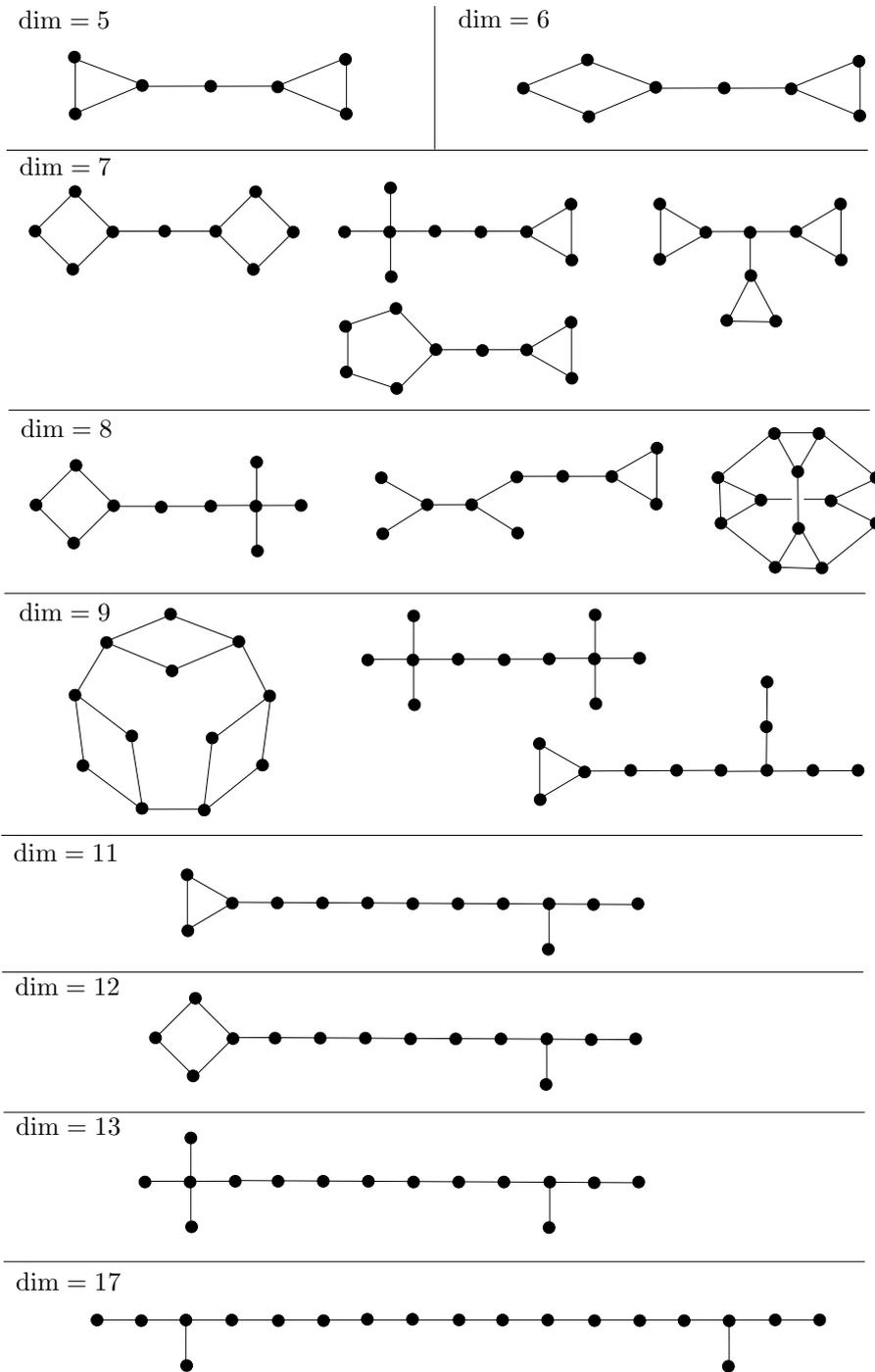Coxeter diagrams of polytopes with mutually intersecting facets, with angles $\pi/2$ and $\pi/3$ only, distinct from simplices see [PR2].

[Pr2] M. N. Prokhorov, *On polyhedra of finite volume in the Lobachevskii space with dihedral angles $\pi/2$ and $\pi/3$* (Russian), Lectures in mathematics and its applications, Vol. 2, No. 2 (Russian), 151–187, Ross. Akad. Nauk, Inst. Mat. im. Steklova, Moscow, 1988.