


Def $D_n = \langle a, b \mid a^2 = b^n = (ab)^n = 1 \rangle$

whose order is $2n$ ($n \geq 2$)

From a geometric point of view,
 D_n is the symmetric group of n -regular-polygon.

where a denote the symmetry of an axis
 b denote rotate $\frac{2\pi d}{n}$ rad ($\gcd(d, n) = 1$)