

Classification of finite groups (See Wikipedia)

$n = G $	# groups	Group name	<u>* means non Abelian</u>
2	1	$\mathbb{Z}_2(+)$	
→ 3	1	$\mathbb{Z}_3(+)$	
4	2	$\mathbb{Z}_4(+), \mathbb{Z}_2^2(+)$	
→ 5	1	$\mathbb{Z}_5(+)$	
6	2	$\mathbb{Z}_6(+), D_3^*$	
→ 7	1	$\mathbb{Z}_7(+)$	
8	5	$\mathbb{Z}_8(+), (\mathbb{Z}_4 \times \mathbb{Z}_2)(+), \mathbb{Z}_2^3(+), D_4^*, Q^*$	Q^* — Quaternion group.
9	2	$\mathbb{Z}_9(+), \mathbb{Z}_3^2(+)$	
10	2	$\mathbb{Z}_{10}(+) = (\mathbb{Z}_2 \times \mathbb{Z}_5)(+), D_5^*$	
→ 11	1	$\mathbb{Z}_{11}(+)$	
12	5	$\mathbb{Z}_{12}(+) = (\mathbb{Z}_3 \times \mathbb{Z}_4)(+), (\mathbb{Z}_2 \times \mathbb{Z}_6)(+), D_6^*, A_4^*, DiC_3^*$	A_4^* — Alternating group. DiC_3^* — Dicyclic group.

$\mathbb{Z}_n(+)$ is the cyclic group of order n .

$$\mathbb{Z}_2 \times \mathbb{Z}_3 = \{ (0,0), (0,1), (0,2), (1,0), (1,1), (1,2) \}$$

D_n is the dihedral group on $2n$ elements