$(\mathbb{Z}_7, +)$ is a group → add commutative
neutral = 0 → $a + 0 = a$
closure respecté
inverse existe

$(\mathbb{Z}_8, *)$ not a grp →

neutral = 1 → $a \cdot 1 = a$

inverse existe pas pour $\{0, \dots\}$

$(\mathbb{Z}_n^*, *)$ → is a grp → multi commutative
neutre → (1)
~~dkm~~ closure ✓
inverse ✓

---

order
- $2^1 \bmod 7 = 2$
- $2^2 \bmod 7 = 4$
- $2^3 \bmod 7 = 1$ ✓

- $3^1 \bmod 7 = 3$
- $3^2 \bmod 7 = 2$
- $3^3 \bmod 7 =$
- ⋮
- $3^6 \bmod 4 = 1$ ✓

$3^4 \bmod 10 = 1$ ✓

/

(8) 3 ⇒ generateur