

Reading Quiz §3

Consider the group \mathbb{Z}_{10} .

That is the set of equivalence classes on \mathbb{Z} where a is equivalent to b if $a \equiv b \pmod{10}$.

1. [1] What is the order of \mathbb{Z}_{10} ?

2. [1] What is the order of $[2]$ (i.e. the equivalence class of 2) in \mathbb{Z}_{10} ?

3. [1] Find a subgroup of \mathbb{Z}_{10} .

4. [2] Find the center of \mathbb{Z}_{10} .