

Definition 3.j.4. [1B1] By definition ^a “a set A is **finite** and has cardinality n ” if it is equipotent to a set E_n (for a choice of $n \in \mathbb{N}$; note that there is at most one n for which this may hold, by the above Lemma). So when the set is finite, $|A|$ is identified with the natural number of its elements; we will write $|A| = n$. If a set isn't finite, then it is **infinite**.

^aThis is the definition presented in the course. There are also other definitions of “finite set” [?]. See for example the exercise [04M]