

Name: _____

Lecture 22, class activity. Equiv rel & Partitions.

Let A be a set, and let $f: A \rightarrow A$ be any function. We say $x\mathcal{R}y \iff f(x) = f(y)$.

1. Show that \mathcal{R} is an equivalence relation.
2. Determine the equivalence classes of \mathcal{R} .
3. Show directly (not using today's theorem!) that these classes form a partition.
4. If f is injective, describe the relation \mathcal{R} .