

Answer on question 38239 – Math – Abstract Algebra

What is the number of elements in the smallest equivalence relation over set A with $|A|=n$?

In mathematics, an **equivalence relation** is a relation that, loosely speaking, partitions a set so that every element of the set is a member of one and only one cell of the partition.

Therefore the smallest equivalence relation on a set A is

$$R\{(a, a) \mid a \in A\}$$

So, $n(R)=n(A)=n$.

Answer: n.