

My formalization project

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0.1 Green's preorders (from `MyProject/GreensRelations.lean`)

Definition 1 (Green's R -preorder). Let M be a monoid and $x, y \in M$. We define $x \leq_R y$ iff there exists $z \in M$ with $x \cdot z = y$. This relation is reflexive and transitive.

Lemma 2 (Reflexivity of \leq_R). *For every $x \in M$, $x \leq_R x$.*

Proof. Put proof description here. □