Let $(E,*)$ be a monoïd, if $x \in E$ and x have a symetric x^{-1} then x^{-1} is unique.

Proof:
Let $(x_1^{-1}, x_2^{-1}) \in E^2$ such as $x * x_1^{-1} = e = x * x_2^{-1}$ and $x_1^{-1} * x = e = x_2^{-1} * x$
$\Rightarrow x_1^{-1} * x * x^{-1} = x_2^{-1} * x * x^{-1}$
$\Rightarrow x_1^{-1} = x_2^{-1}$