If A, A' are right ideals of R, we can form the additive group $I = I(A',A) := \{r \in R : rA' \subseteq A\}$, which contains A as a subgroup. As before, we can check easily that sending $r \in I$ to the left multiplication by r defines a group isomorphism $\lambda : I/A \to \mathrm{Hom}_R(R/A',R/A)$. It follows, therefore, that $R/A \sim R/A'$ as R-modules iff there exists an element $r \in I$ such that $rR + A = R$, and $rx \in A \Rightarrow x \in A'$. The situation becomes a lot simpler if A, A' are replaced by the maximal right ideals m and m′. Since R/m and R/m' are simple R-modules, they are isomorphic iff there is a *nonzero* homomorphism from R/m' to R/m. Thus, the isomorphism criterion boils down to $I(\mathrm{m}',\mathrm{m}) \neq \mathrm{m}$; that is, there exists an element $r \in R\backslash\mathrm{m}$ such that $r\mathrm{m}' \subseteq \mathrm{m}$. In this case, we have $rR + \mathrm{m} = R$ (by the maximality of m). If J is any ideal contained in m′, then $J = (rR + \mathrm{m})J = rJ + \mathrm{m}J \subseteq r\mathrm{m}' + \mathrm{m} = \mathrm{m}$. By symmetry, it follows that m and m′ contain exactly the same ideals of R.