comaximal ideals

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Let R be a ring.

Two ideals I and J of R are said to be *comaximal* if $I + J = R$. If R is `http://planetmath.org/Ring`unital, this is equivalent to requiring that there be $x \in I$ and $y \in J$ such that $x + y = 1$.

For example, any two distinct maximal ideals of R are comaximal.

A set $\mathcal{S}$ of ideals of R is said to be *pairwise comaximal* (or just *comaximal*) if $I + J = R$ for all distinct $I, J \in \mathcal{S}$.