self-reducible

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A search problem R is $\mathcal{C}$ self-reducible if there is a $\mathcal{C}$ Cook reduction of R to $L(R)$. That is, if the decision problem for $L(R)$ is $\mathcal{C}$ then so is the search problem for R.

If R is polynomially self-reducible then it is called self-reducible.

Note that $L(R)$ is trivially Cook reducible to R.