

Re: Partial recursive functions and minimization

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- *From:* Twoflower <standa.kurik@xxxxxxxxxx>
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Thank you both, I think I finally understand it. Anyway, for me it's still unclear how can there be something like Normal Form Theorem for partial recursive function and how can the primitive recursive predicate T which is used in it look like.

Our professor told us we can look at the predicate $T(e,x,z)$ in a way that for number of program 'e', input 'x' and pair $z = \langle y,s \rangle$, the predicate is true if the program 'e' for input 'x' yields the value 'y' after exactly 's' steps. Ok, maybe as I'm writing this, I'm slowly coming towards understanding it – this predicate really can be made primitive recursive, because the decision, whether "The program 'e' yields value 'y' on input 'x' after 's' steps." can be always answered so the predicate is really primitive recursive. Am I right with these speculations?

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