

# A METHOD TO GENERALIZE BY RECURRENCE OF SOME KNOWN RESULTS

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A great number of articles widen known results, and this is due to a simple procedure, of which it is good to say a few words:

Let say that one generalizes a known mathematical proposition  $P(a)$ , where  $a$  is a constant, to the proposition  $P(n)$ , where  $n$  is a variable which belongs to subset of  $N$ .

To prove that  $P$  is true for  $n$  by recurrence means the following: the first step is banal, since it is about the known result  $P(a)$  (and thus it was already verified before by other mathematicians!). To pass from  $P(n)$  to  $P(n+1)$ , one uses too  $P(a)$ : therefore one widens a proposition by using the proposition itself, in other words the found generalization will be paradoxically proved with the help of the particular case from which one started! (e. g. the generalizations of Hölder, Minkovski, Tchebychev, Euler).