sum_le[4,23]

$\forall k{:}\mathbb{N},\ f,\ g{:}(\mathbb{N}_{<k} \rightarrow \mathbb{Z}).\ (\forall x{:}\mathbb{N}_{<k}.\ f(x) \leq g(x)) \Rightarrow \mathrm{sum}(f(x) \mid x < k) \leq \mathrm{sum}(g(x) \mid x < k)$

http://www.nuprl.org/FDLcontent/p0_802137_/p96_137871_{sum_le}.html