sum_bound[4,23]

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

http://www.nuprl.org/FDLcontent/p0_802137_/p96_138809_{sum_bound}.html