

### **sum-ite**<sup>4,23</sup>

$$\begin{aligned} & \forall k: \mathbb{N}, f, g: (\mathbb{N}_{<k} \rightarrow \mathbb{Z}), p: (\mathbb{N}_{<k} \rightarrow \mathbb{B}). \\ & \text{sum}(\text{if } p(i) \rightarrow f(i) + g(i) \text{ else } f(i) \text{ fi } \mid i < k) \\ & = \\ & \text{sum}(f(i) \mid i < k) + \text{sum}(\text{if } p(i) \rightarrow g(i) \text{ else } 0 \text{ fi } \mid i < k) \end{aligned}$$