

## **sum\_linear**<sup>4,23</sup>

$$\forall n:\mathbb{N}, f, g:(\mathbb{N}_{<n} \rightarrow \mathbb{Z}). \text{sum}(f(x) \mid x < n) + \text{sum}(g(x) \mid x < n) = \text{sum}(f(x) + g(x) \mid x < n)$$