

**nth\_tl\_decomp\_eq**<sup>4,23</sup>

$\forall T:\text{Type}, m:\mathbb{N}, L:T \text{ List}. m < \|L\| \Rightarrow \text{nth\_tl}(m;L) = (L[m].\text{nth\_tl}(1+m;L)) \in T \text{ List}$