

# Typing Rules for Number-List Primitives

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$$\Gamma \vdash \textit{empty} : \textit{nlist}$$
$$\frac{\Gamma \vdash L : \textit{nlist}}{\Gamma \vdash \{\textit{empty? } L\} : \textit{boolean}}$$
$$\frac{\Gamma \vdash n : \textit{number} \quad \Gamma \vdash L : \textit{nlist}}{\Gamma \vdash \{\textit{ncons } n \ L\} : \textit{nlist}}$$
$$\frac{\Gamma \vdash L : \textit{nlist}}{\Gamma \vdash \{\textit{first } L\} : \textit{number}}$$
$$\frac{\Gamma \vdash L : \textit{nlist}}{\Gamma \vdash \{\textit{rest } L\} : \textit{nlist}}$$