First Order versus Higher Order

construction of lists

- Define $\langle x, y\rangle = \{\{x\}, \{x, y\}\}$
- Show

$$[x_1;\ x_2;\ \ldots;\ x_n] \mapsto \langle x_1, \langle x_2, \ldots, \langle x_n, \varnothing\rangle \ldots\rangle\rangle$$

encodes HOL lists of sets as sets

- No need for `Vrec`