

**New! Recursive Definitions of Sets:** The set  $S$  (pick a name) is defined by:

Basis Step: Specify finitely many elements of  $S$

Recursive Step: Give rule(s) for creating a new element of  $S$  from known values existing in  $S$ , and potentially other values.

The set  $S$  then consists of all and only elements that are put in  $S$  by finitely many (a nonnegative integer number) of applications of the recursive step after the basis step.