0.1 Subset relation

0.1.1 Subset

If all terms which are members of term x are also members of term y, then x is a subset of y.

$\forall x \forall y[(\forall z(z \in x \rightarrow z \in y)) \leftrightarrow (x \subseteq y)]$

0.1.2 Proper subset

If two sets are equal, then each is a subset of the other. A proper subset is one which is a subset, and not equal to the other set.

$\forall x \forall y[((\forall z(z \in x \rightarrow z \in y))) \wedge (x \neq y) \leftrightarrow (x \subset y)]$