Why

We want to say things about objects and sets of objects.

Discussion

An *assertion* is a sequence of symbols which is assumed to be true.

Let a be an object. Let A be a set. A *membership assertion* is $a \in A$. Notice that $\in$ is not symmetric. $a \in A$ does not assert the same meaning as $A \in a$.

Let b be an object. An *identity assertion* is $a = b$. Notice that $a = b$ asserts the same as $b = a$.

A *primitive sentence* is a belonging assertion or an equality assertion. The symbolism used includes three pieces: the names of the two objects and the symbols $\in$ or $=$.

A *logical form* is one of several structures:

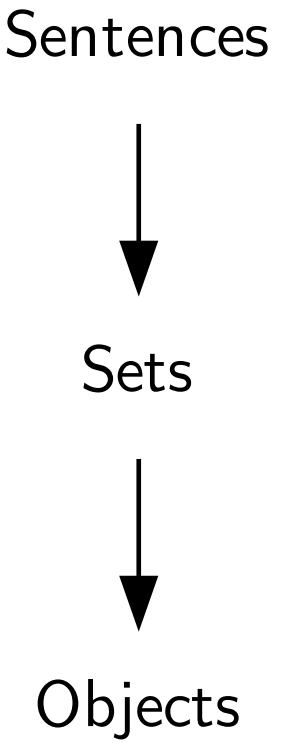
1. and
2. or (in the sense of "— or — or both")
3. not
4. implies (in the sense of "if —, then —"
5. if and only if

6. for some

7. for all

This list is redundant.

A *sentence* primitive sentence or a logical form with a primitive sentence or a logical form with sentences.


Sentences
Sets
Objects