



COUNTS

Definition

We want to know how many of an indistinguishable object we have. Let a be that object. If I have one of a , say I have the set $\{a\}$. The weirdness is that two of a is not the pair $\{a, a\}$, because that pair is the same " a " and so the same as two. We can take notes from ordered pairs, though, and say that when I have two of a I have (a, a) . What then of the generalization to tripels? I have $(a, a, a) = ((a, a), a)$ Which is $\{\{(a, a)\}, \{(a, a), a\}\}$ Which is $\{\{\{\{a\}, \{a\}\}\}, \{\{\{a\}, \{a\}\}, a\}\}$.

$$1 = \{a\}$$

$$2 = (a, a) = \{\{a\}, \{a\}\}$$

$$3 = ((a, a), a) = (2, a)$$

