

0.1 Equivalence classes

We have already ready defined the relationship equality, between terms.

$$a = b.$$

Sometimes we may wish to talk about a collection of terms which are all equal to each other. This is an equivalence class.

Though we have not yet defined it, integers are example of this. For example -1 can be written as $0 - 1$, $1 - 2$ and so on.

$$\forall y \text{ for all } x = y \rightarrow x \in z$$

For all sets, we can call the class of all sets equal to the set an equivalence class.

This does not necessarily exist.