

## Identity

## 1 Why

We can give the same object two different names, but it is still one object.

## 2 Definition

An object is itself. If the object that two names refer to is the same, then we say that the first name equals the second name.

## 2.1 Notation

We denote that the object named a and the object named b refer to the same object by a = b, read aloud as: "a is b." We denote that the object a and b refer to different objects by  $a \neq b$ , read aloud as: "a is not b."

We may also read the notation a=b aloud as "a equals b". Other English readings include: "a is the same as b", "a is equivalent to b", "a refers to the same object as b."