

Identity

1 Why

We can give the same object two different names.

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."