



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 .”