

Answer on Question #51691 – Math - Abstract Algebra

Mathematical Identities are sometimes indicated by the triple bar ----- when and why ??

Solution

In mathematics, an equivalence relation is a binary relation between two elements of a set which groups them together as being "equivalent" in some way. Let a , b , and c be arbitrary elements of some set X . Then " $a \sim b$ " or " $\mathbf{a \equiv b}$ " denotes that a is equivalent to b .

If $a \Rightarrow b$ and $b \Rightarrow a$, then a and b are said to be equivalent, a relationship which is written symbolically in this work as $a \equiv b$.

An equivalence relation " \equiv " is reflexive, symmetric, and transitive.

Examples:

1 Dollar is equivalent to 100 cents

120 seconds is equivalent to 2 minutes