

Properties of Equality

Property	Symbol
Reflexive	$a = a$
Symmetric	If $a = b$ then $b = a$
Transitive	If $a = b$ and $b = c$ then $a = c$
Addition	If $a = b$ then $a + c = b + c$
Subtraction	If $a = b$ then $a - c = b - c$
Multiplication	If $a = b$ then $a * c = b * c$
Division	If $a = b$ then $a / c = b / c$... AS LONG AS C IS NOT 0
Substitution	If $a = b$ then b can replace a in any expression (in the same context).