

Algebra Properties:

Properties of Equality: Let a , b , and c be real numbers

Addition Property: If $a = b$, then $a + c = b + c$

Subtraction Property: If $a = b$, then $a - c = b - c$

Multiplication Property: If $a = b$, then $ac = bc$.

Division Property: If $a = b$ and c is not zero
, then $a/c = b/c$.

Reflexive Property: For any real number a , $a = a$.

Symmetric Property: If $a = b$, then $b = a$.

Transitive Property: If $a = b$ and $b = c$, then $a = c$.

Substitution Property: If $a = b$, then a may be substituted for any b in any expression or equation.

Geometry Properties:

Properties of Congruence: (same shape and same size)

Reflexive Property: Any geometric figure is congruent to itself

Symmetric Property: If one geometric figure is congruent to a second, then the second is congruent to the first.

Transitive Property: If one geometric figure is congruent to a second, and the second is congruent to a third, then the first object is congruent to the third object.