ON PSEUDO COMMUTATIVE ELEMENTS

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In this paper we introduce a new notion in loops called pseudo commutativity. A pair of elements \( a, b \in L \) such that \( ab = ba \) is said to pseudo commutative pair if \( a(xb) = (bx)a \) (or \( = b(xa) \)) for all \( x \in L \). [or \( (ax)b = (bx)a \) or \( = b(xa) \)].

Further we prove in a commutative loop \( L \) in \( a_i^2 = e \) for every \( a_i \in L \) where \( e \) is the identity element of \( L \), is pseudo commutative. Analogous to commutators in loops we define pseudo commutator \( P(L) \). If \( L \) is a commutative loop then \( P(L) = L \).