It should be noted that Lemma 1 is interesting, independent of *strong* Lie ideals, for it generalizes a result of [1]. This generalization can be stated as follows:

THEOREM 2. *Let A be a simple ring of characteristic $\neq 2$, with either its center $Z=(0)$ or of dimension greater than 16 over its center, and with an involution defined on it; then if either K, S, $[K, K]$ or $[K, S]$ are finite dimensional, A is finite dimensional.*

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TRIANGLE INEQUALITY IN l-GROUPS

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In [1, p. 309] G. Birkhoff remarks that "In a *commutative* l-group, we can . . . prove the triangle inequality $|a+b| \leqq |a|+|b|$, but this does not seem to hold in general." The purpose of this note is to show that in fact *if*

$$|a+b| \leqq |a| + |b| \tag{1}$$

for all a and b in the additive l-group G, then G is commutative.

PROOF. It is sufficient to show that any two positive elements of G are permutable [2, p. 234]. Suppose therefore that x and y are positive elements of G. Taking $a=-x$ and $b=-y$ in (1), we obtain $x+y \geqq |-x-y| = y+x$. Similarly $y+x \geqq x+y$. Hence $x+y=y+x$. This completes the proof.

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