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Corrections to my paper "On a certain class of abstract algebras"

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by

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In the above paper the following changes should be made:

(1) In example (a) on p. 116 it must be assumed that L satisfies the cancellation law, i.e. from $rx = 0$ with $r \in R$, $x \in L$ follows $r = 0$ or $x = 0$.

(2) In the example (b) on the same page condition (iii) is not sufficient and must be replaced by the following two:

"(iii) For any two elements f, g of S there exists such an element h in S that $f = gh$ or $g = fh$.

(iv) For every $g \in S$ from $g(a) = g(b)$ with $a, b \in X$ follows $a = b$".

(3) In the Remark on p. 122 "left-cancellation" must be replaced by "right-cancellation" since it is obviously that fact which is proved there.

(4) In view of (3) theorem IV on p. 122 is false, because there may be no left-cancellation law in S. What is really proved there is the following fact: *If A is a v^{**}-algebra in which every operation depends on at most one variable, then either A consists of algebraic constants only or there exists a semigroup S of transformations of X such that the identical transformation belongs to S, the right-cancellation law holds and for any f, g, F, G in S from $fg = FG$ it follows that with a suitable $H \in S$, $g = HG$ or $G = Hg$. Moreover, every algebraic operation has the form given in* (b), pp. 116-117.

However, not every algebra so constructed must be a v^{**}-algebra and so this theorem fails as a representation theorem.

The main results of the paper are unaffected by these changes.

I am indebted to Professor K. Urbanik for calling my attention to these facts.

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