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ON THE DIFFERENTIABILITY OF MAPPINGS AND CONVEX FUNCTIONALS: A CORRECTION

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In my paper with the same title (this Journal 8,4(1967), 735-752) there are the following inaccuracies. In Theorem 5 the sentence: "Then the set ..." should be read as follows: "Then the set Z of all $x \in X$ where the Gâteaux differential $VF(x,h)$ exists is a $F_{\sigma\delta}$-set for any (but fixed) $h \in X$." Similarly for Theorem 7, Corr.2,3. In Theorem 7 read "the Gâteaux differential $D\varphi(x,h)$ " for "the Gâteaux derivative". In Theorem 6 we must add the assumption that X is complete. Thus Theorem 6 reads as follows: "Let X be a separable Banach space, $\varphi: X \longrightarrow E_1$ a convex Lipschitzian functional on X. Then the set Z of all $x \in X$ where the Gâteaux derivative $\varphi'(x)$ of φ exists is a G_δ-set of the second category and hence it contains a G_δ-set which is dense in X. Page 746^{10}: read " $X - Z_n$ are the first category" for " $X - Z$ are nondense." P.746_6: read "Since X is complete" for "If X is complete".