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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,  $\varphi: X \rightarrow E_1$  a convex Lipschitzian functional on  $X$ . Then the set  $Z$  of all  $x \in X$  where the Gâteaux derivative  $\varphi'(x)$  of  $\varphi$  exists is a  $G_\delta$ -set of the second category and hence it contains a  $G_\delta$ -set which is dense in  $X$ . Page 746<sup>10</sup>: read " $X - Z_n$  are the first category" for " $X - Z$  are nondense." P.746<sub>6</sub>: read "Since  $X$  is complete" for "If  $X$  is complete".