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Title: On Leibniz differences

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Cauchy differences, which are two-place functions of the form $F(x,y) = f(x) + f(y) - f(x+y)$, are characterized on abelian groups by means of the cocycle functional equation together with symmetry. Here we introduce an analogous result for functions of the form $L(x,y) = yf(x) + xf(y) - f(xy)$ for functions $L : K^2 \to K$ where K is a field of characteristic 0. Such functions are called Leibniz differences.

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