1116-28-440 **Xiao-Xiong Gan*** (xiao-xiong.gan@morgan.edu), Department of Mathematics, Morgan State University, Baltimore, MD 21251. *Minkowski's Inequality with One-Form.*

The classical Minkowski's inequality has two different forms based on the values of the positive number p:

Part 1. If $1 \leq p < \infty$, then

$$\|f + g\|_p \leq \|f\|_p + \|g\|_p;$$

Part 2. If $0 < p < 1$, then

$$\|f + g\|_p \geq \|f\|_p + \|g\|_p$$

where $\|f\|_p = (\int |f|^p)^{1/p}$.

We provide a one-form Minkowski's inequality for all $p > 0$. A non-conjugate Hölder's inequality is also introduced. Some applications of the one-form Minkowski's inequality and non-conjugate Hölder's inequality are introduced too (Received September 01, 2015)