

From (2) and (3), we have

$$\begin{aligned} \log \underset{p \rightarrow 0}{Lt} y &= \log \left(\prod_{i=1}^k x_i \right)^{1/k} \\ \Rightarrow \underset{p \rightarrow 0}{Lt} y &= \left(\prod_{i=1}^k x_i \right)^{1/k} \\ \text{Or, } \underset{p \rightarrow 0}{Lt} \left(\frac{\sum_{i=1}^k x_i^p}{k} \right)^{1/p} &= \left(\prod_{i=1}^k x_i \right)^{1/k}, \text{ as desired.} \end{aligned}$$

For $k = 2$ we get Kazarinoff's result.

Suggested Reading

- [1] N D Kazarinoff, *Analytic Inequalities*, Holt, New York, pp.63–64, 1961.
- [2] D S Mitrinovic, *Analytic Inequalities*, Springer-Verlag, Berlin, pp. 272–273, 1970.
- [3] B C Carlson, *Amer. Math. Monthly*, Vol.79, pp.615–618, 1972.
- [4] Tung-Po Lin, *Amer. Math. Monthly*, Vol.81, pp.879–883, 1974.

Erratum

Resonance, Vol.12, August 2007

Page 5: second line

In February 2007, ACM ... named Frances E Allen the recipient of the 2007 Turing award.

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