

Problem 11634 unfortunately appeared without an exponent on the denominator.

It should have read as follows.

11634D. M. Băținețu-Giurgiu, Matei Basarab National College, Bucharest, Romania, and Neculai Stanciu, George Emil Palade, Buzău, Romania. Let (x_1, \dots, x_n) be an n -tuple of positive numbers, and let $X = \sum_{k=1}^n x_k$. Let a and m be nonnegative numbers, and let b, c, d be positive. Suppose $p \geq 1$ and $cX^p > d \max_{1 \leq k \leq n} x_k^p$. Show that

$$\sum_{k=1}^n \frac{aX + bx_k}{(cX^p - dx_k^p)^m} \geq \frac{(an + b)n^{mp}}{(cn^p - d)^m} X^{1-mp}. \quad \square$$

Note that in the printed copy the parentheses and the exponent m were missing so that what actually appeared was

$$\sum_{k=1}^n \frac{aX + bx_k}{cX^p - dx_k^p} \geq \frac{(an + b)n^{mp}}{cn^p - d} X^{1-mp}.$$

This of course voids the conclusion.