Problema săptămânii 290

Dacă a, b, c sunt numere reale pozitive, demonstraţi că

$$\frac{(1+a)^2(1+b)^2}{1+c^2} + \frac{(1+b)^2(1+c)^2}{1+a^2} + \frac{(1+c)^2(1+a)^2}{1+b^2} \geq 8(a+b+c).$$

Dorin Mărghidanu

Problem of the week no. 290

If a, b, c are positive real numbers, prove that

$$\frac{(1+a)^2(1+b)^2}{1+c^2} + \frac{(1+b)^2(1+c)^2}{1+a^2} + \frac{(1+c)^2(1+a)^2}{1+b^2} \geq 8(a+b+c).$$

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