

Problema săptămânii 338

Fie a, b, c numere reale pozitive. Demonstrați inegalitatea

$$\frac{a}{a + \sqrt{(a+b)(a+c)}} + \frac{b}{b + \sqrt{(b+a)(b+c)}} + \frac{c}{c + \sqrt{(c+a)(c+b)}} \leq 1.$$

Problem of the week no. 338

Let a, b, c be positive real numbers. Prove the inequality

$$\frac{a}{a + \sqrt{(a+b)(a+c)}} + \frac{b}{b + \sqrt{(b+a)(b+c)}} + \frac{c}{c + \sqrt{(c+a)(c+b)}} \leq 1.$$