

**Problema săptămânii 53**

Fie  $a, b, c$  numere reale pozitive cu proprietatea

$$\frac{a}{1+a} + \frac{b}{1+b} + \frac{c}{1+c} = 2.$$

Demonstrați că

$$\frac{\sqrt{a} + \sqrt{b} + \sqrt{c}}{2} \geq \frac{1}{\sqrt{a}} + \frac{1}{\sqrt{b}} + \frac{1}{\sqrt{c}}.$$

**Problem of the week no. 53**

Let  $a, b, c$  be positive real numbers such that

$$\frac{a}{1+a} + \frac{b}{1+b} + \frac{c}{1+c} = 2.$$

Prove that

$$\frac{\sqrt{a} + \sqrt{b} + \sqrt{c}}{2} \geq \frac{1}{\sqrt{a}} + \frac{1}{\sqrt{b}} + \frac{1}{\sqrt{c}}.$$