

Problema săptămânii 378

a) Numerele reale pozitive a, b, c satisfac $abc = 1$. Arătați că

$$\frac{1+ab}{1+a} + \frac{1+bc}{1+b} + \frac{1+ca}{1+c} \geq 3.$$

b) Numerele reale pozitive a, b, c, d satisfac $abcd = 1$. Arătați că

$$\frac{1+ab}{1+a} + \frac{1+bc}{1+b} + \frac{1+cd}{1+c} + \frac{1+da}{1+d} \geq 4.$$

Problem of the week no. 378

a) Positive real numbers a, b, c satisfy $abc = 1$. Prove that

$$\frac{1+ab}{1+a} + \frac{1+bc}{1+b} + \frac{1+ca}{1+c} \geq 3.$$

b) Positive real numbers a, b, c, d satisfy $abcd = 1$. Prove that

$$\frac{1+ab}{1+a} + \frac{1+bc}{1+b} + \frac{1+cd}{1+c} + \frac{1+da}{1+d} \geq 4.$$