

Problema săptămânii 130

Fie a, b, c lungimile laturilor unui triunghi. Demonstrați că

$$\frac{a}{(b+c)(b+c-a)} + \frac{b}{(c+a)(c+a-b)} + \frac{c}{(a+b)(a+b-c)} \geq \frac{9}{2(a+b+c)}.$$

Problem of the week no. 130

Let a, b, c be the lengths of the sides of a triangle. Prove that

$$\frac{a}{(b+c)(b+c-a)} + \frac{b}{(c+a)(c+a-b)} + \frac{c}{(a+b)(a+b-c)} \geq \frac{9}{2(a+b+c)}.$$