

**Problema săptămânii 226**

Fie  $x, y, z \geq 0$ . Demonstrați că  $x^4(y+z) + y^4(z+x) + z^4(x+y) \leq \frac{1}{12}(x+y+z)^5$ .  
Când are loc egalitatea?

**Problem of the week no. 226**

Let  $x, y, z \geq 0$ . Prove that  $x^4(y+z) + y^4(z+x) + z^4(x+y) \leq \frac{1}{12}(x+y+z)^5$ .  
When does equality hold?