

Weekly Problem Competition

Friday, September 18, 2009

Let a_1, a_2, \dots, a_n be n positive numbers, such that their product is equal to 1. Show that

$$(1 + a_1)(1 + a_2) \dots (1 + a_n) \geq 2^n .$$

Remarks:

The rules and results of the competition can be found at <http://www.math.iit.edu/~weeklyproblem>

You have to submit the solution by email, to weeklyproblem@math.iit.edu

Please feel free to tell any IIT undergraduate student about the competition.

**Thank you for your participation
Good Luck !**