



Bilkent University
Department of Mathematics

PROBLEM OF THE MONTH

Term: May 2007

For all positive a, b, c satisfying $a + b + c = 1$, prove the following inequality:

$$\frac{1}{a(2-a)+bc} + \frac{1}{b(2-b)+ac} + \frac{1}{c(2-c)+ab} \geq \frac{9}{2}$$