



Bilkent University
Department of Mathematics

PROBLEM OF THE MONTH

Term: September 2009

Let (a_n) be a sequence of real numbers such that $a_1 = 2$ and $a_{n+1} = \frac{n}{a_1 + a_2 + \cdots + a_n}$ for each natural number n . Prove that $a_{2009} > 0.9995$.