



Bilkent University
Department of Mathematics

PROBLEM OF THE MONTH

Term: June 2011

Given natural numbers a and b , the sequence d_n , $n = 1, 2, \dots$ is defined by

$$d_n = \sqrt[n+1]{a^n + b^n}$$

Determine all pairs (a, b) for which all elements of the sequence $\{d_n\}$ are integers.