



Bilkent University
Department of Mathematics

PROBLEM OF THE MONTH

Term: June 2006

Let a_1, a_2, \dots, a_N be pairwise different positive integer numbers satisfying the following two conditions:

1. $a_i < 22$ for all $1 \leq i \leq N$.
2. $a_k + a_l \neq a_m + a_n$ for all pairwise different k, l, m, n .

Find the maximal possible value of N .