

# Bilkent University Department of Mathematics 

## Problem Of The Month

Term: September 2006

Suppose that a natural number $n$ is an odd perfect number: $n$ is odd and $n$ is equal to the sum of all its positive divisors (including 1 and excluding $n$ ). Prove that $n$ is not divisible by 105 .

Note: The existence of any odd perfect number is still unknown.

