

October 10, 2019

Abstract

1 Problem 1 Day 1 Spain, round 2, 1992

1. A natural number N is divisible by 83 and N^2 has exactly 63 divisors. Find the smallest N with these properties.

2 Problem 1 Day 2 Spain, round 2, 1992

Prove that the arithmetic progression 3,7,11,15,... contains infinitely many prime numbers.