

Homework 21

Apply the Rabin-Miller test with the given values of n and a to test if n is composite. In each case,

- (a) is n proven composite by this test?
 - (b) is n proven prime by this test?
 - (c) if n is proven composite, would it be proven composite from the Fermat test with the same value of a ?
 - (d) does this test give a way of factoring n ?
1. $n = 4033$ and $a = 2$
 2. $n = 4371$ and $a = 2$
 3. $n = 4373$ and $a = 3$
 4. $n = 4681$ and $a = 3$