MATH 42-NUMBER THEORY PROBLEM OF THE DAY #15 DUE THURSDAY, APRIL 7, 2011

1. Determine whether 2 is a square mod 3, 5, 7, 11, 13, 17, 19, and more if necessary. Do you notice any patterns? Do the methods on the problem set 7 (particularly problems 7 and 8) suggest anything?