Homework 21, due October 23

(1) Test 118901521 for primality using the Fermat test for several values of $a$. Is 118901521 prime?

(2) Test 104173 for primality using the Solovay-Strassen test. Use enough values of $a$ to be 99 percent sure that it is prime. (Recall from class that if a number is composite, the test will tell you so for at least half of the possible $a$.)

(3) (Page 200, problem 13) Test 38200901201 for primality using the Miller-Rabin test with $a = 2$. Then test using $a = 3$. Explain your results.