

Dr. Z.'s Number Theory Homework assignment 14

1. Use Korslet's theorem to decide whether or not the following are Carmichael numbers
a. 1729 b. 2000 c. 105 d. 6601.
2. Use the Fermat primality test to investigate wheter the following integers are composite or probably primes (by picking up-to two witnesses)
a. 15 b. 9 c. 11 d. 23.
3. Use the Miller-Rabin primality test to investigage whether the following integers n are prime or composite by picking two (if necessary) random a 's between 2 and $n - 2$
a. 30 b. 13 c. 14 d. 11.