Quiz \# 6 for Dr. Z.'s Number Theory Course for Oct. 31,, 2013

NAME: (print!) $\qquad$

E-MAIL ADDRESS: (print!)

1. ( 4 points) Illustrate the proof of Wilson's theorem for $p=19$.
2. (3 points) How many (circular) necklaces are there of length $p$, with $a$ colors? Explain!
3. (3 points) Use the Miller-Rabin primality test to investigage whether the integer 15 is prime or composite, by picking one random $a$ 's between 2 and 13 .
