Quiz 8

written by Alvin Wan . alvinwan.com/cs70

Thursday, February 18, 2016

This quiz does not count towards your grade. It exists to simply gauge your understanding. Treat this as though it were a portion of your midterm or final exam. "Intuition Practice" might be tricky; watch out for subtleties. "Proofs" will be challenging to start; develop an arsenal of *approaches* to starting a problem.

1 Proofs

1. Prove or disprove that $x^y = x^{y(mod(p-1))}(mod p)$. (Hint: Apply Fermat's Little Theorem)

2. Prove or disprove that all polynomials in $GF(p)$, where p is prime, must have degree less than or equal to $p - 2$. (Hint: Apply Fermat's Little Theorem)