

Test 2 Study Guide

CIS 306

Dr. John P. Baugh – Winter 2021

Total: _____ / 150

1. [15 pts] Cryptography calculation (RSA)
2. [15 pts] Cryptography calculation (RSA)
3. [15 pts] Modular arithmetic
4. [15 pts] Congruence modular arithmetic (using the $(a-b)/c$ property)
5. [20 pts] Greatest common divisor (GCD) using Euclid's algorithm
6. [20 pts] Two-person, zero sum game clear equilibrium strategy (not mixed strategy)
7. [15 pts] Finding vectors given points
8. [15 pts] Find magnitudes of given vectors
9. [10 pts] Finding distance from a point to a line
10. [10 pts] Given a polygon, use the Surveyor's formula to find the area
 - Make SURE to know what clockwise and counter-clockwise mean, and why they're important for this formula.
 - With a triangle, it's not a big deal (you flip the result if you get a negative)
 - With a polygon with greater than three sides, you will get a very different answer if you don't know clockwise vs counter-clockwise