# Fall 2017 CIS 3362 Homework #2 Grading Criteria

0) 6 pts - for free, add to all assignments that are properly submitted in WC. (Don't give if there is no submission.)

1) 10 pts - 2 pts for setting up two affine ciphers, 5 pts for the math of function composition, 3 pts for the explanation of why the result is also a valid affine cipher.

2) 15 pts - 5 pts for the regular Euclidean Algorithm, 8 pts for reversing the equations to get to 43 x 327 - 95 x 148 = 1. 1 pt for extracting -95, 1 pt for converting to 232.

3) 15 pts - 1 pt for subtracting 22, 4 pts for Euclidenan 8 pts for Extended Euclidean and extracting either -12 or 67, 1 pt for using the modular inverse, 1 pt for reducing the keys in the range 0 to 78.

4) 10 pts - 8 pts for plugging into the formula, 2 pts for expressing the answer as either a fraction in lowest terms of a decimal approximation.

5) 10 pts - 8 pts for plugging into the formula, 2 pts for expressing the answer as either a fraction in lowest terms of a decimal approximation.

6) 11 pts - There are 22 letters, do a 1/2 pt per letter rounding down (record an integer out of 11 for the score).

7) 15 pts - 1 pt per pair

8) 8 pts - 1 pt per pair, 1 pt for removing the Q to obtain the final answer.