ENEE 459E/CMSC 498R: Introduction to Cryptology
Euclidean Algorithm Class Exercise 4/18/17

1. Use the Extended Euclidean Algorithm to find integers X, Y such that $24X + 17Y = 1$:

2. Use the Extended Euclidean Algorithm to find integers X, Y such that $27X + 16Y = 1$:

ENEE 459E/CMSC 498R: Introduction to Cryptology
Chinese Remainder Theorem Class Exercise 4/18/17

1. Use the method described in class to find the unique number x modulo 35 such that:

$$x \; mod \; 7 = 4$$
$$x \; mod \; 5 = 2$$

2. Use the method described in class to find the unique number x modulo 56 such that:

$$x \; mod \; 7 = 5$$
$$x \; mod \; 8 = 3$$