

Cryptography
ECE 5632
Assignment 1
Spring 2025

Name:.....

ID:.....

Problem 1

For each of the following equations, find an integer x that satisfies the equation.

(a) $7^x \equiv 2 \pmod{11}$

(b) $3x - 2 \equiv 0 \pmod{7}$

Problem 2

The text "VPHOWX ORUUWX" was encrypted using affine cipher with key $(a = 11, b = 5)$. Find the corresponding plaintext.