

Name: _____ SPIRE ID: _____

CS 485, Fall 2026

Exercise #4: Logistic Regression

Assume binary logistic regression.

features: (count “nigerian”, count “prince”, count “nigerian prince”)

$$\mathbf{x} = (1, \quad 1, \quad 1)$$

$$\boldsymbol{\beta} = (-1.0, \quad -1.0, \quad 4.0)$$

$$\mathbf{P}(y=1 \mid \mathbf{x}) =$$