

Title: 4.8 Question 1

$$\Pr(Y=1|x) = p(x) = \frac{e^{\beta_0 + \beta_1 x}}{1 + e^{\beta_0 + \beta_1 x}} \quad (4.2)$$

$$= \left(\frac{1}{1 + e^{\beta_0 + \beta_1 x}} \right) e^{\beta_0 + \beta_1 x}$$

$$p(x) = (1 - p(x)) e^{\beta_0 + \beta_1 x}$$

$$\frac{p(x)}{1 - p(x)} = e^{\beta_0 + \beta_1 x} \quad (4.3)$$

