602_hw2

William Tirone

3.1

a)

$$P(Y_1 = y_1, \dots, Y_{100} = y_{100}|\theta) = \text{by independence} = \prod_{i=1}^n P(Y_i|\theta) = \prod_{i=1}^n \theta^{y_i} (1-\theta)^{1-y_i} = \theta^{\sum_{i=1}^n y_i} (1-\theta)^{100-\sum_{i=1}^n y_i}; y = 0$$