1. [10 points] This is similar to question 20 on page 113.

At a certain college, 54% of the students are female. We also know that 10% of the students are majoring in computer science, and we know that 7% of the students are women majoring in computer science.

Randomly select a computer science student. What is the probability that it is a woman?
1. \( W = \{ \text{woman} \} \) and \( C = \{ \text{computer science} \} \).

Then

\[
\mathbb{P}(W|C) = \frac{\mathbb{P}(W \cap C)}{\mathbb{P}(C)} = \frac{7}{10} = .7.
\]