(1) The Probability of being stopped at one traffic light is 0.40. The Probability of being stopped at the next traffic is 0.30 The probability of being stopped at both lights is 0.12

Part a. Are the two lights independent?

Part b. Given that a car stops at the first traffic light. what is the probability the car will stop at the next light? (Answer as a decimal to the hundredths)

(2) Suppose that a Bayesian Spam filter is trained on a set of 2000 spam messages and 1000 messages that are not spam. The word "lifetime" appears in 350 spam messages that are not spam. Would an incoming message be rejected as spam if it contains the word "lifetime" and the threshold for rejecting a message is 0.9? (Yes or no)