

## I. Probability 3

Answer the following:

- a) If  $P(A) = 0.35$  and  $P(B) = 0.55$  and A and B are independent events, what is the probability  $P(A \text{ and } B)$ ?
- b) If  $P(A) = 0.35$ ,  $P(B) = 0.55$ ,  $P(A \text{ and } B) = 0.25$  and A and B are dependent events, what is the probability  $P(A|B)$ ?

*Use R to solve this problem. Include in your answer the R-commands used to arrive at the results.*