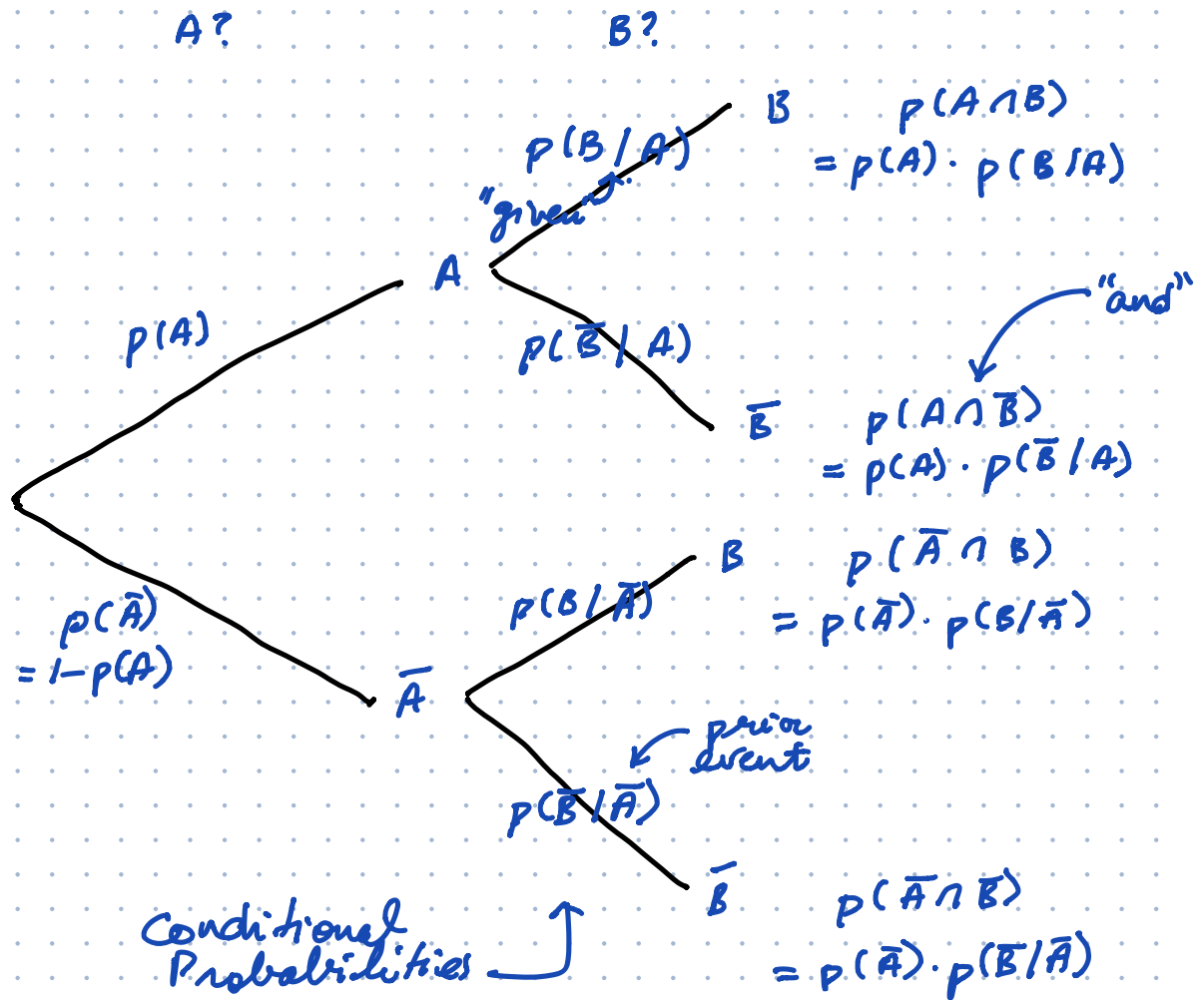


Independence and Conditional Probability



Independent: $P(B|A) = P(B) \Rightarrow P(A \cap B) = P(A) \cdot P(B)$
 eg. coin flipping, dice rolling, card draw

Dependence: $P(A \cap B) = P(A) \cdot P(B|A)$
 $\frac{P(A \cap B)}{P(A)} = P(B|A)$