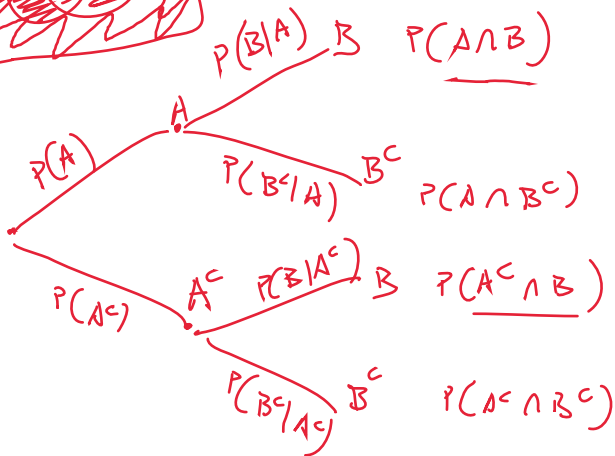


Tree Diagrams: A and B are two events



Bayes' Rule

$$\underline{\underline{P(A|B) = \frac{P(A \cap B)}{P(B)} = \frac{P(A) \cdot P(B|A)}{P(A) \cdot P(B|A) + P(A^c) \cdot P(B|A^c)}}}$$

Handwritten annotations in red:

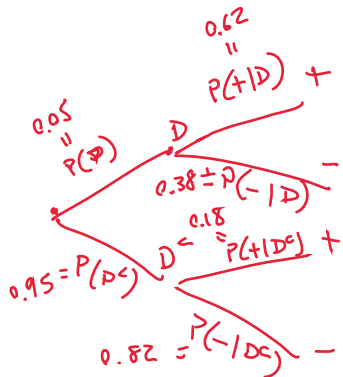
- An arrow points from $P(A \cap B)$ to the numerator $P(A) \cdot P(B|A)$.
- An arrow points from the circled $P(B)$ in the denominator to the sum $P(A \cap B) + P(A^c \cap B)$.
- The denominator is expanded as $P(A \cap B) + P(A^c \cap B)$.
- The entire denominator is bracketed and labeled $P(B)$.

ISI CH3 Question 8 a - c

$+$ = { mother tested positive }

$-$ = { " " negative } = $+$ ^c

D = { mother has pre-eclampsia disorder }



$$\underline{\underline{P(D|+)}}$$