

## Bayes Rule

$$P(A \wedge B) = P(A|B) \cdot P(B) = P(B|A) \cdot P(A)$$

↑  
and

$$P(B|A) = P(A|B) \cdot P(B) / P(A)$$

$B, \sim B?$

$P(B), A$

## Bayesian Updating

PBE

- 1) Play may reveal info about type subsequent rational should reflect that info
- 2) Rationality calls for specifying beliefs about opponents type rationally at all information set

A strategy profile is a PBE if only if:

- 1) Each player's actions are optimal given their beliefs and the other players strategies
- 2) All beliefs are congruent w/ the equilibrium and are consistent w/ Bayes rule where it's applicable