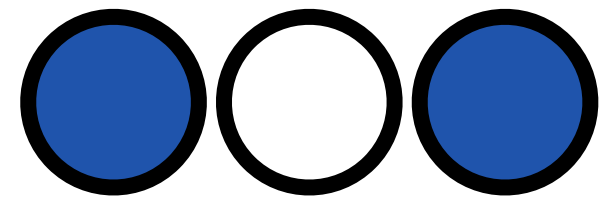


Bringing it all together



$$P(\theta = 0.25 \mid [B, W, B]) \propto P([B, W, B] \mid \theta = 0.25) \times P(\theta = 0.25)$$

Likelihood, how many ways to produce the data under the assumed conjecture

Prior, other information about the conjecture not related to the data

Bringing it all together

$$P(\theta = 0.25 \mid [B, W, B]) \propto P([B, W, B] \mid \theta = 0.25) \times P(\theta = 0.25)$$

Posterior probability of the conjecture, considering all the information in the data and the prior

Likelihood, how many ways to produce the data under the assumed conjecture

Prior, other information about the conjecture not related to the data