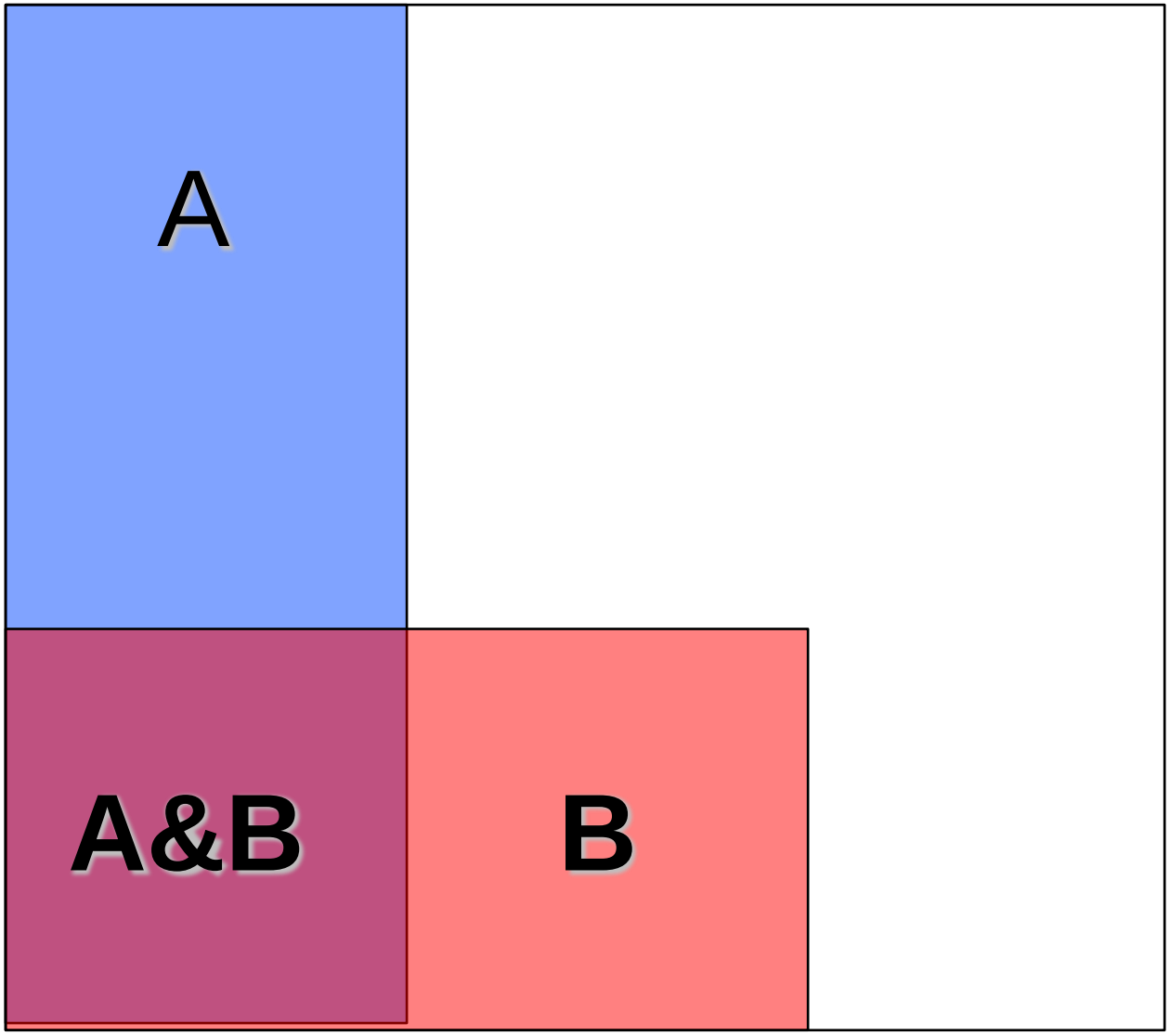
Bayes Rule

P(A&B) =
P(A|B)P(B)

1/9 =
½ x 2/9