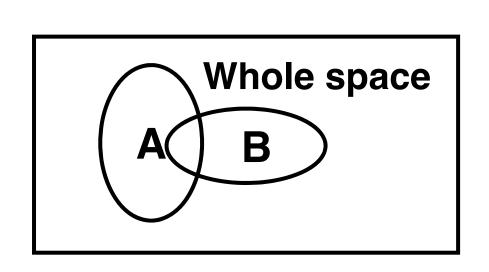
P, Conditional P, and Derivation of Bayes' Theorem in Pictures



$$P(A|B) = \frac{\emptyset}{\bigcirc}$$

$$P(BIA) = \frac{\sqrt{}}{}$$

$$P(A \cap B) = \frac{\emptyset}{}$$

$$P(A) \times P(B|A) = \frac{0}{|A|} \times \frac{0}{|A|} = \frac{0}{|A|} = P(A \cap B)$$

$$\Rightarrow$$
 P(BIA) = P(AIB) \times P(B) / P(A)