

Formulas Provided on Midterm Exam 2

$$P(E) = \frac{n(E)}{n(S)}$$

$$P(E) + P(\bar{E}) = 1$$

$$P(E) = 1 - P(\bar{E})$$

$$P(\bar{E}) = 1 - P(E)$$

$$P(A \text{ or } B) = P(A) + P(B)$$

$$P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$$

$$P(A \text{ and } B) = P(A) \cdot P(B)$$

$$P(A \text{ and } B) = P(A) \cdot P(B | A)$$

$$P(B | A) = \frac{P(A \text{ and } B)}{P(A)}$$