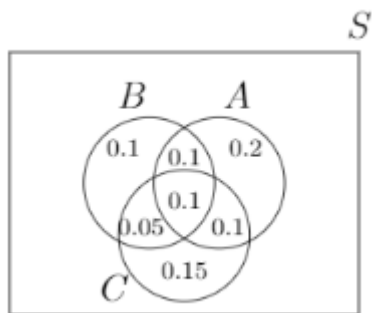


Topics Covered in this Exercise:

- **Set Theory and Venn Diagrams**
- **Basic Probability**
- **Conditional Probability**
- **Union of Events**
- **Intersection of Events**
- **Complement of Events**



$$P(A | B) =$$

$$\frac{0.2}{0.35}$$

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

$$P(C | B) =$$

$$\frac{0.15}{0.35}$$

$$P(C | B) = P(C \cap B) / P(B)$$

$$P(B | A \cup C) =$$

$$\frac{0.25}{0.7}$$

$$P(B | A \cup C) = P(B \cap (A \cup C)) / P(A \cup C)$$

$$P(B \mid A, C) =$$

$$\frac{0.1}{0.2}$$

$$P(B \mid A, C) = P(B \cap A \cap C) / P(A \cap C)$$