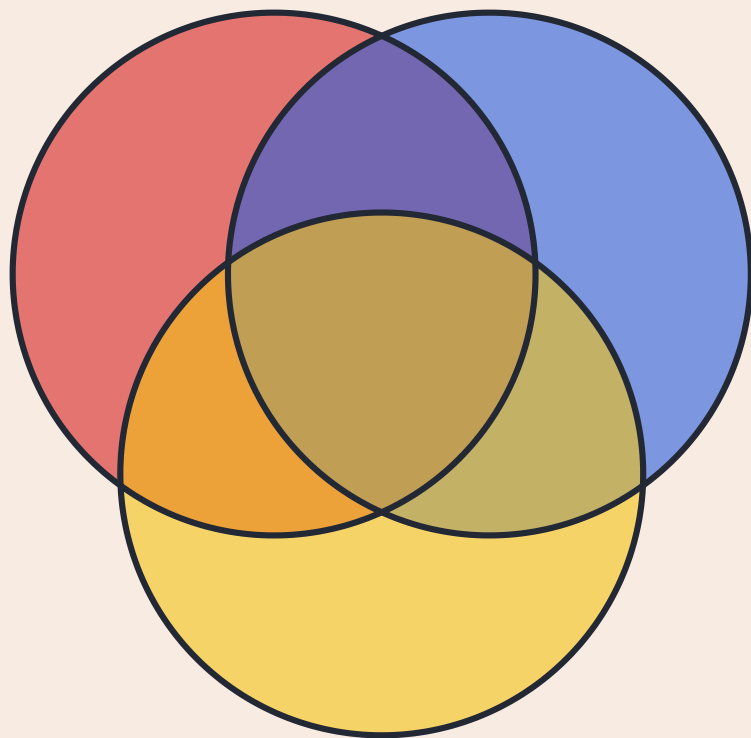


Probability

**Union** **B**

$$P(A \cup B) = P(A) + P(B) - P(A \cap B)$$

Intersection **B**

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

Conditional **B**

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

Independent **B**

$$P(A \cap B) = P(A)P(B), \quad P(A | B) = P(A)$$

B given in the exam. Learn the rest.