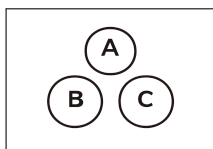


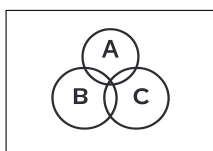
7

Discrete Distribution Complementary Event



$$S = \{1, 2, 3, 4, 5, 6, 7, 8\}$$

$$A = \{1, 2\}$$



$$P(A) = |A|/|S| = 2/8 = 0.25$$

$$P(A^C) = 1 - P(A) = 0.75$$



$$P(L) = 0.40$$

$$P(R) = 0.30$$

$$P((L \cup R)^C) = 0.35$$

$$P(L \cap R) = ?$$

7

Discrete Distribution Complementary Event



$$\begin{aligned}P(L) &= 0.40 \\P(R) &= 0.30 \\P((L \cup R)^C) &= 0.35 \\P(L \cap R) &= ?\end{aligned}$$

$$\begin{aligned}P(L \cup R) &= 1 - P((L \cup R)^C) \\P(L \cup R) &= 1.00 - 0.35 = 0.65\end{aligned}$$

$$P(L \cap R) = P(L) + P(R) - P(L \cup R) = 0.40 + 0.30 - 0.65 = 0.05$$