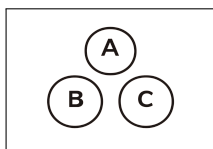


7

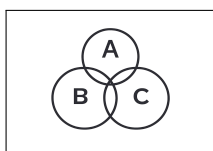
Discrete Distribution
Complementary Event

M



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

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



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

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



$$Q = 1/4(K + T)$$

$$K = 3T$$

$$P(K \cup Q) = ?$$



$$Q = 1/4(K + T)$$

$$K = 3T$$

$$P(K \cup Q) = ?$$

$$Q = \frac{1}{4}(K + T) = \frac{1}{4}(3T + T) = \frac{1}{4}(4T) = T$$

$$P(K \cup Q) = \frac{K+Q}{K+Q+T} = \frac{3T+T}{3T+T+T} = \frac{4}{5} = 0.80$$