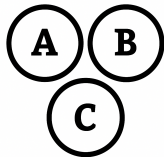


C

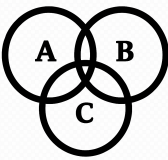
Complementary Event

C



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

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



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

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

?

$$P(A) = 4/52$$

$$P(D) = 13/52$$

$$P(A \cap D) = 1/52 \neq 0.00$$

$$P(A \cup D) = ?$$

C

Complementary Event

C



$$P(A) = 4/52$$

$$P(D) = 13/52$$

$$P(A \cap D) = 1/52 \neq 0.00$$

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

$$P(A \cup D) = 4/52 + 13/52 - 1/52 = 16/52 = 4/13$$