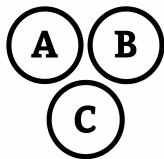


D

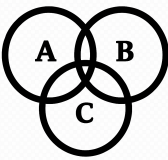
Complementary Event

D



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

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



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

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

?

$$R = 4$$

$$Y = 8$$

$$G = 6$$

$$P(R \cup G) = ?$$

D Complementary Event D



$$R = 4$$

$$Y = 8$$

$$G = 6$$

$$P(R \cup G) = P(R) + P(G)$$

$$P(R) = R / (R + Y + G) = 4 / (4 + 8 + 6) = 4 / 18$$

$$P(G) = 6 / (4 + 8 + 6) = 6 / 18$$

$$P(R \cup G) = 4 / 18 + 6 / 18 = 10 / 18 = 5 / 9 \approx 0.56$$