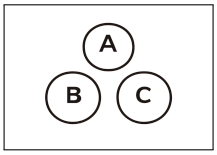
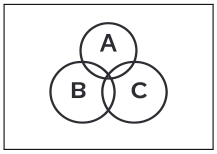
7 Discrete Distribution Complementary Event D



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

$A = \{1, 2\}$



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

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

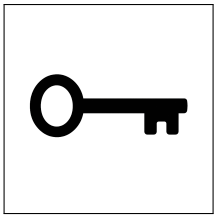
$R = 4$

$Y = 8$

$G = 6$

$P(R \cup G) = ?$

7 Discrete Distribution Complementary Event D



$R = 4$
$Y = 8$
$G = 6$
$P(R \cup G) = P(R) + P(G)$

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

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

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