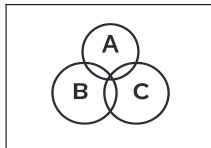
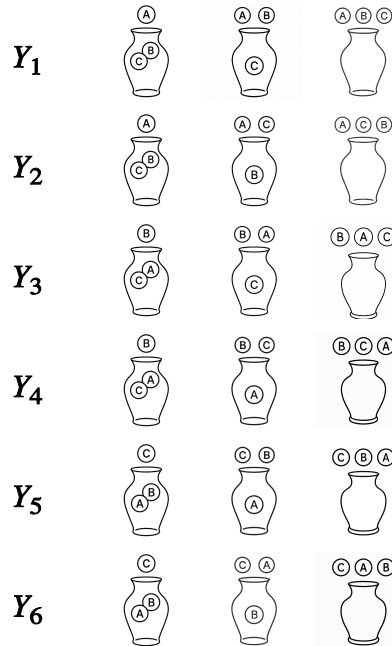
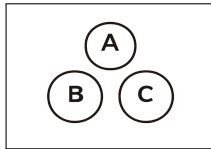


4

Discrete Distribution Permutations

K



$$N = \{A, B, C\}$$

$$|Y| = \textcircled{\#}(N) = rP_k = \frac{r!}{(r-k)!}$$

$$|Y| = |N| \times (|N|-1) \times (|N|-2)$$

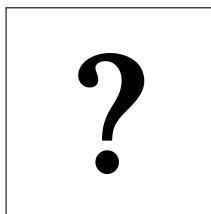
$$|Y| = 3 \times 2 \times 1 = 6$$

$$M = \{T, H\}$$

$$|X| = \textcircled{\#}(M) = |M|^3$$

$$|X| = |M| \times |M| \times |M|$$

$$|X| = 2 \times 2 \times 2 = 8$$



$$N = \{1, 2, 3, 4, 5, 6\}$$

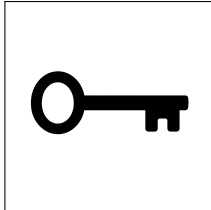
$$X = \textcircled{\#}(N, 5)$$

$$|X| = rP_k = |N|! / (|N| - 5)! = ?$$

4

Discrete Distribution
Permutations

K



$$N = \{1, 2, 3, 4, 5, 6\}$$

$$X = \textcircled{\equiv}(N, 5)$$

$$|X| = rPk = |N|! / (|N| - 5)!$$

$$|X| = |N|x(|N| - 1)x(|N| - 2)x(|N| - 3)x(|N| - 4) = |N|!$$

$$|X| = 6x5x4x3x2 = 720$$