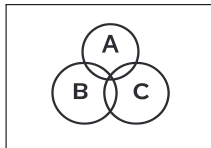
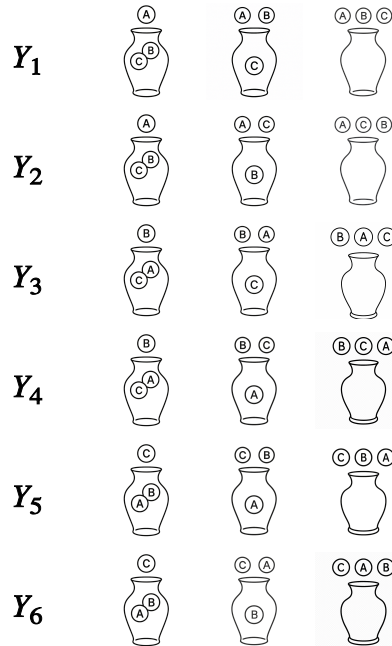
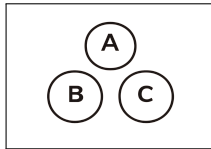


4

Discrete Distribution Permutations

E



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

$$|Y| = \sum_{k=0}^n rP_k = \frac{r!}{(r-k)!}$$

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

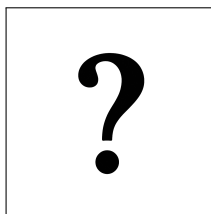
$$|Y| = 3 \times 2 \times 1 = 6$$

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

$$|X| = \sum_{k=0}^n |M|^k$$

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

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



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

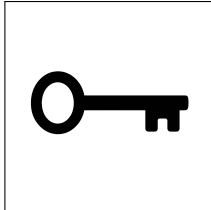
$$X = \sum_{k=0}^n (N, 4)$$

$$|X| = ?$$

4

Discrete Distribution
Permutations

E



$$N = \{1, 2, 3, \dots, 26\}$$

$$X = \textcircled{\equiv}(N, 4)$$

$$|X| = rPk = |N|! / (|N| - 4)!$$

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

$$|X| = 5x4x3x2 = 120$$