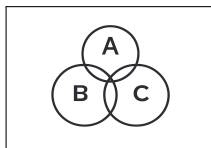
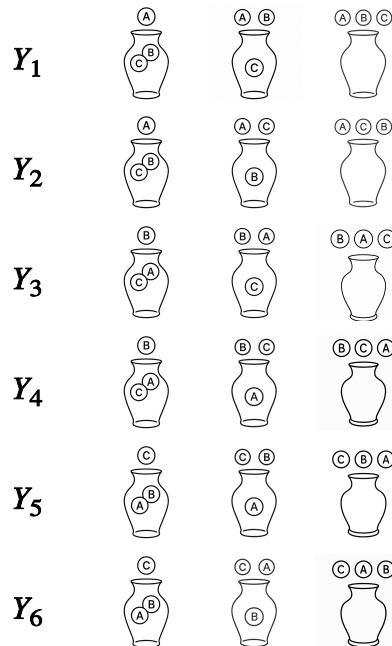
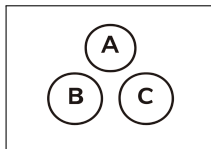


3

Discrete Distribution Counting

P



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

$$Y = \textcircled{\textcircled{\textcircled{N,3}}}$$

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

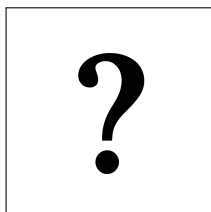
$$|Y| = 3 \times 2 \times 1 = 6$$

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

$$X = \textcircled{\textcircled{\textcircled{M,3}}}$$

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

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



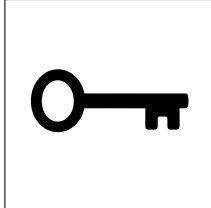
$$S = \{A, B, C, \dots Z\}$$

$$|\textcircled{\textcircled{\textcircled{S,5}}}| - |\textcircled{\textcircled{\textcircled{S,5}}}| = ?$$

3

Discrete Distribution
Counting

P



$S = \{A, B, C, \dots Z\}$

$$| \bigoplus_{i=1}^5 (S, 5) | - | \bigoplus_{i=1}^4 (S, 5) | = (|S| \times |S| \times |S| \times |S| \times |S|) - (|S| \times |S| \times |S| \times |S|) = (26 \times 26 \times 26 \times 26 \times 26) - (26 \times 26 \times 26 \times 26) = 98,176$$