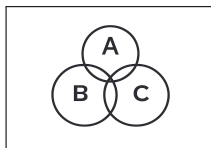
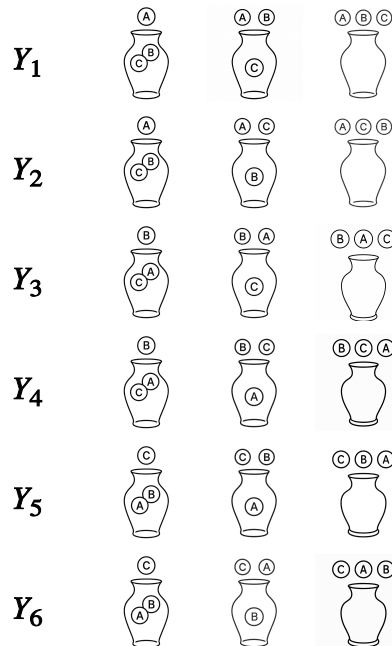
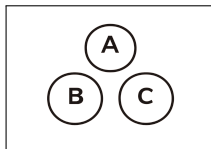


3

Discrete Distribution Counting

Q



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

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

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

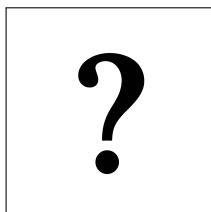
$$|Y| = 3 \times 2 \times 1 = 6$$

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

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

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

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



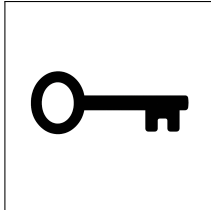
$$S = \{0, 1\}$$

$$|\textcircled{\textcircled{\textcircled{S,50}}}| = ?$$

3

Discrete Distribution Counting

Q



$$S = \{0, 1\}$$

$$|\oplus(S, 50)| = |S|^{50} \approx 1.13 \times 10^{15}$$