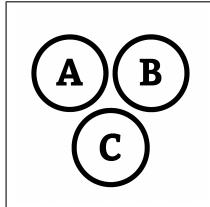
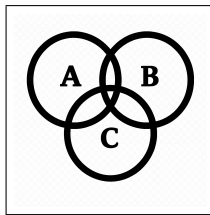


**J**

# Bernoulli Trials

**J**

$$n = 2$$
$$p = 0.50$$
$$k = 1$$



$$P(X = k) = \binom{n}{k} (p)^k (1 - p)^{n-k}$$
$$P(X = 1) = \binom{2}{1} (0.50)^1 (0.50)^1$$
$$P(X = 1) = 2 \times 0.50 \times 0.50$$
$$P(X = 1) = \boxed{0.50}$$



$$n = 6$$
$$p = 0.05$$
$$P(X = 1) = ?$$

**J**

## Bernoulli Trials

**J**

$$\begin{aligned}n &= 6 \\p &= 0.05 \\P(X = 1) &= ?\end{aligned}$$

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$$P(X = 1) = \binom{6}{1}(0.05)^1(0.95)^5$$

$$P(X = 1) = 6 \cdot 0.05 \cdot 0.95^5$$

$$P(X = 1) \approx 6 \cdot 0.05 \cdot 0.77378$$

$$P(X = 1) \approx \boxed{0.2321}$$