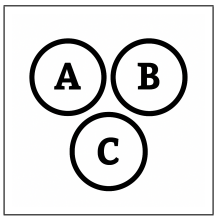
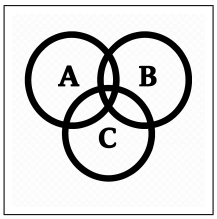
A Bernoulli Trials A



$n = 2$

$p = 0.50$

$k = 1$

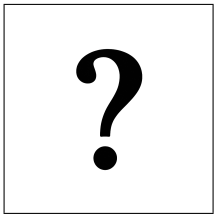


$P(X = k) = \binom{n}{k}(p)^k(1-p)^{n-k}$

$P(X = 1) = \binom{2}{1}(0.50)^1(0.50)^1$

$P(X = 1) = 2 \times 0.50 \times 0.50$

$P(X = 1) = \boxed{0.50}$



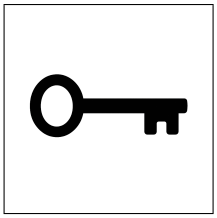
$n = 8$

$p = 0.10$

$k = 1$

$P(X = 1) = ?$

A Bernoulli Trials A



$n = 8$
$p = 0.10$
$k = 1$
$P(X = 1) = ?$

$P(X = k) = \binom{n}{k} (p)^k (1 - p)^{n-k}$
$P(X = 1) = \binom{8}{1} (0.10)^k (0.90)^{n-k}$
$P(X = 1) = 8 \times 0.10 \times 0.90^7$
$P(X = 1) \approx 8 \times 0.10 \times 0.4782969$
$P(X = 1) \approx 0.3826$