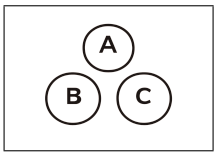
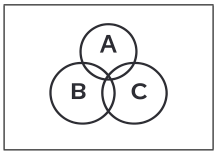
Expected Value & Variance Binomial Distribution



$n = 6$

$p = \frac{1}{2}$



$E[X] = np = 6 \cdot \frac{1}{2} = \boxed{3}$

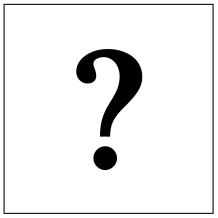
$\text{Var}(X) = np(1-p) = 3 \cdot \frac{1}{2} = \boxed{\frac{3}{2}}$

$E[X^2] = \text{Var}(X) + (E[X])^2$

$E[X^2] = \frac{3}{2} + 3^2$

$E[X^2] = \frac{3}{2} + 9$

$E[X^2] = \boxed{\frac{21}{2}}$

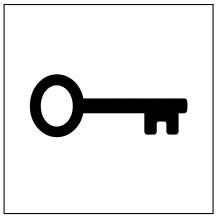


$n = 400$

$p = 0.1$

$E[X] = ?$

N Expected Value & Variance Binomial Distribution N



$n = 400$
$p = 0.1$
$E[X] = ?$

$E[X] = np = 400 \times 0.1$