$$
\begin{gathered}
\sum_{x}(x-\mu)^{2} f(x) \\
E\left(X^{2}\right)-[E(X)]^{2}
\end{gathered}
$$

The followings are for ? distribution:

$$
\begin{aligned}
f(x) & =\binom{n}{x} p^{x}(1-p)^{n-x} \\
E(X) & =n p \\
\operatorname{Var}(X) & =n p(1-p) \\
\binom{n}{x} & =\frac{n!}{x!(n-x)!}
\end{aligned}
$$

The followings are for ? distribution:

$$
f(x)=\frac{\mu^{x} e^{-\mu}}{x!}
$$

