

$\text{var}(x_1)$ $\text{cov}(x_1, x_2)$ \dots
 $\text{cov}(x_1, x_2)$ $\text{var}(x_2)$ $\text{cov}(x_2, x_3)$

~~$\begin{matrix} a & b & c & d \\ b & e & f & g \\ c & f & h & i \\ d & g & i & j \end{matrix}$~~

if X and Y are indep.

$$E(XY) = E(X)E(Y)$$

A and B are indep. if \bar{I}_A and \bar{I}_B are

$$I_A I_B = I_{A \cap B}$$

$P_n(A \cap B) = P_n(A)P_n(B)$ if A and B independent

$$E(X) = \sum_{\omega \in \Omega} X(\omega) P_{\Omega}(\omega)$$