1

\ddots

This command produces three dots on a diagonal. Its most common use is to indicate repetition along the diagonal of a matrix.

Example:

\$\$\pmatrix{0&\ldots&0\cr
\vdots&\ddots&\vdots\cr
 0&\ldots&0\cr}\$\$

produces:

$$\begin{pmatrix} 0 & \dots & 0 \\ \vdots & \ddots & \vdots \\ 0 & \dots & 0 \end{pmatrix}$$