

## 基礎数理 B 行列の例

配布回だけでなく何度も使うので捨てないように。再配布はしない。

$$\begin{aligned}
 A_1 &= \begin{pmatrix} 3 & 6 \end{pmatrix}, A_2 = \begin{pmatrix} 5 & 2 \end{pmatrix}, A_3 = \begin{pmatrix} 1 & 7 \end{pmatrix}, A_4 = \begin{pmatrix} 9 & 3 \end{pmatrix}, A_5 = \begin{pmatrix} 2 & 7 \end{pmatrix}, A_6 = \begin{pmatrix} 6 & 6 \end{pmatrix}, \\
 A_7 &= \begin{pmatrix} 5 \\ 4 \end{pmatrix}, A_8 = \begin{pmatrix} 6 \\ 0 \end{pmatrix}, A_9 = \begin{pmatrix} 8 \\ 6 \end{pmatrix}, A_{10} = \begin{pmatrix} 0 \\ 7 \end{pmatrix}, A_{11} = \begin{pmatrix} 0 \\ 5 \end{pmatrix}, A_{12} = \begin{pmatrix} 5 \\ 8 \end{pmatrix}, A_{13} = \begin{pmatrix} 6 \\ 4 \end{pmatrix}, \\
 A_{14} &= \begin{pmatrix} 3 & 5 \\ 1 & 3 \end{pmatrix}, A_{15} = \begin{pmatrix} 0 & 7 \\ 0 & 9 \end{pmatrix}, A_{16} = \begin{pmatrix} 2 & 6 \\ 5 & 5 \end{pmatrix}, A_{17} = \begin{pmatrix} 2 & 6 \\ 1 & 7 \end{pmatrix}, A_{18} = \begin{pmatrix} 0 & 0 \\ 9 & 6 \end{pmatrix}, \\
 A_{19} &= \begin{pmatrix} 7 & 1 \\ 1 & 2 \end{pmatrix}, A_{20} = \begin{pmatrix} 3 & 5 \\ 4 & 4 \end{pmatrix}, A_{21} = \begin{pmatrix} 2 & 1 \\ 3 & 3 \end{pmatrix}, A_{22} = \begin{pmatrix} 6 & 5 \\ 1 & 2 \end{pmatrix}, A_{23} = \begin{pmatrix} 3 & 1 \\ 7 & 6 \end{pmatrix}, \\
 A_{24} &= \begin{pmatrix} 3 & 4 & 3 \end{pmatrix}, A_{25} = \begin{pmatrix} 5 & 0 & 9 \end{pmatrix}, A_{26} = \begin{pmatrix} 6 & 4 & 6 \end{pmatrix}, A_{27} = \begin{pmatrix} 1 & 4 & 5 \end{pmatrix}, A_{28} = \begin{pmatrix} 4 & 5 & 8 \end{pmatrix}, \\
 A_{29} &= \begin{pmatrix} 9 \\ 6 \\ 3 \end{pmatrix}, A_{30} = \begin{pmatrix} 7 \\ 7 \\ 4 \end{pmatrix}, A_{31} = \begin{pmatrix} 7 \\ 5 \\ 5 \end{pmatrix}, A_{32} = \begin{pmatrix} 2 \\ 8 \\ 9 \end{pmatrix}, A_{33} = \begin{pmatrix} 2 \\ 7 \\ 0 \end{pmatrix}, A_{34} = \begin{pmatrix} 4 \\ 3 \\ 8 \end{pmatrix}, A_{35} = \begin{pmatrix} 7 \\ 1 \\ 1 \end{pmatrix}, \\
 A_{36} &= \begin{pmatrix} 7 & 0 & 8 \\ 0 & 5 & 3 \end{pmatrix}, A_{37} = \begin{pmatrix} 9 & 8 & 7 \\ 7 & 3 & 3 \end{pmatrix}, A_{38} = \begin{pmatrix} 8 & 9 & 2 \\ 0 & 1 & 0 \end{pmatrix}, A_{39} = \begin{pmatrix} 7 & 7 & 7 \\ 0 & 4 & 9 \end{pmatrix}, A_{40} = \begin{pmatrix} 6 & 9 & 8 \\ 8 & 8 & 0 \end{pmatrix}, \\
 A_{41} &= \begin{pmatrix} 6 & 8 \\ 2 & 3 \\ 1 & 5 \end{pmatrix}, A_{42} = \begin{pmatrix} 2 & 0 \\ 1 & 5 \\ 2 & 3 \end{pmatrix}, A_{43} = \begin{pmatrix} 8 & 2 \\ 1 & 3 \\ 7 & 3 \end{pmatrix}, A_{44} = \begin{pmatrix} 6 & 4 \\ 2 & 2 \\ 6 & 2 \end{pmatrix}, A_{45} = \begin{pmatrix} 1 & 2 \\ 6 & 6 \\ 0 & 2 \end{pmatrix}, \\
 A_{46} &= \begin{pmatrix} 8 & 2 & 8 \\ 7 & 8 & 9 \\ 7 & 4 & 4 \end{pmatrix}, A_{47} = \begin{pmatrix} 5 & 1 & 5 \\ 4 & 9 & 1 \\ 1 & 7 & 1 \end{pmatrix}, A_{48} = \begin{pmatrix} 1 & 7 & 4 \\ 0 & 3 & 2 \\ 7 & 0 & 7 \end{pmatrix}, A_{49} = \begin{pmatrix} 8 & 8 & 1 \\ 9 & 6 & 5 \\ 7 & 6 & 3 \end{pmatrix}, A_{50} = \begin{pmatrix} 8 & 3 & 8 \\ 4 & 0 & 1 \\ 9 & 4 & 1 \end{pmatrix}, \\
 A_{51} &= \begin{pmatrix} 0 & 7 & 0 & 4 \end{pmatrix}, A_{52} = \begin{pmatrix} 0 & 9 & 3 & 6 \end{pmatrix}, A_{53} = \begin{pmatrix} 3 & 5 & 6 & 6 \end{pmatrix}, A_{54} = \begin{pmatrix} 2 & 1 & 5 & 1 \end{pmatrix}, \\
 A_{55} &= \begin{pmatrix} 7 \\ 8 \\ 3 \\ 3 \end{pmatrix}, A_{56} = \begin{pmatrix} 2 \\ 5 \\ 1 \\ 6 \end{pmatrix}, A_{57} = \begin{pmatrix} 1 \\ 1 \\ 6 \\ 6 \end{pmatrix}, A_{58} = \begin{pmatrix} 3 \\ 6 \\ 9 \\ 8 \end{pmatrix}, A_{59} = \begin{pmatrix} 6 \\ 6 \\ 3 \\ 5 \end{pmatrix}, A_{60} = \begin{pmatrix} 0 \\ 0 \\ 8 \\ 8 \end{pmatrix}, A_{61} = \begin{pmatrix} 2 \\ 9 \\ 2 \\ 2 \end{pmatrix}, \\
 A_{62} &= \begin{pmatrix} 8 & 8 & 4 & 5 \\ 0 & 5 & 4 & 6 \end{pmatrix}, A_{63} = \begin{pmatrix} 0 & 5 & 5 & 3 \\ 6 & 5 & 3 & 6 \end{pmatrix}, A_{64} = \begin{pmatrix} 0 & 7 & 6 & 1 \\ 5 & 0 & 8 & 3 \end{pmatrix}, A_{65} = \begin{pmatrix} 0 & 0 & 3 & 5 \\ 0 & 5 & 1 & 0 \end{pmatrix}, \\
 A_{66} &= \begin{pmatrix} 0 & 6 \\ 2 & 3 \\ 1 & 5 \\ 6 & 8 \end{pmatrix}, A_{67} = \begin{pmatrix} 2 & 0 \\ 1 & 6 \\ 4 & 3 \\ 9 & 0 \end{pmatrix}, A_{68} = \begin{pmatrix} 5 & 6 \\ 1 & 9 \\ 8 & 5 \\ 4 & 3 \end{pmatrix}, A_{69} = \begin{pmatrix} 7 & 2 \\ 3 & 1 \\ 9 & 7 \\ 3 & 9 \end{pmatrix}, A_{70} = \begin{pmatrix} 3 & 5 \\ 2 & 5 \\ 2 & 0 \\ 5 & 7 \end{pmatrix}, \\
 A_{71} &= \begin{pmatrix} 4 & 8 & 0 & 0 \\ 5 & 5 & 2 & 1 \\ 8 & 6 & 4 & 5 \end{pmatrix}, A_{72} = \begin{pmatrix} 2 & 6 & 9 & 6 \\ 1 & 9 & 0 & 8 \\ 8 & 3 & 7 & 7 \end{pmatrix}, A_{73} = \begin{pmatrix} 5 & 0 & 4 & 1 \\ 8 & 3 & 8 & 3 \\ 3 & 8 & 5 & 9 \end{pmatrix}, A_{74} = \begin{pmatrix} 3 & 9 & 2 & 1 \\ 5 & 7 & 9 & 7 \\ 5 & 0 & 6 & 6 \end{pmatrix}, \\
 A_{75} &= \begin{pmatrix} 7 & 2 & 1 \\ 3 & 2 & 5 \\ 6 & 1 & 3 \\ 1 & 6 & 6 \end{pmatrix}, A_{76} = \begin{pmatrix} 4 & 3 & 3 \\ 1 & 8 & 1 \\ 3 & 0 & 4 \\ 6 & 6 & 3 \end{pmatrix}, A_{77} = \begin{pmatrix} 8 & 0 & 8 \\ 4 & 0 & 8 \\ 9 & 0 & 2 \\ 0 & 5 & 7 \end{pmatrix}, A_{78} = \begin{pmatrix} 5 & 1 & 0 \\ 0 & 4 & 8 \\ 8 & 0 & 1 \\ 1 & 3 & 9 \end{pmatrix}, A_{79} = \begin{pmatrix} 2 & 6 & 2 \\ 8 & 3 & 8 \\ 2 & 1 & 0 \\ 0 & 7 & 3 \end{pmatrix}, \\
 A_{80} &= \begin{pmatrix} 4 & 2 & 2 & 3 \\ 6 & 1 & 9 & 2 \\ 1 & 3 & 5 & 2 \\ 8 & 2 & 7 & 7 \end{pmatrix}, A_{81} = \begin{pmatrix} 6 & 2 & 1 & 7 \\ 3 & 2 & 4 & 8 \\ 4 & 0 & 2 & 0 \\ 4 & 7 & 4 & 0 \end{pmatrix}, A_{82} = \begin{pmatrix} 0 & 6 & 5 & 6 \\ 9 & 5 & 1 & 0 \\ 0 & 8 & 4 & 8 \\ 0 & 1 & 6 & 8 \end{pmatrix}, A_{83} = \begin{pmatrix} 4 & 9 & 6 & 7 \\ 1 & 2 & 6 & 7 \\ 2 & 0 & 8 & 8 \\ 8 & 2 & 8 & 8 \end{pmatrix},
 \end{aligned}$$