$

\begin{cases}

x+y+z=1\\

x-y-z=2\\

x-y+z=3

\end{cases}\

$

$

\begin{cases}

x+z=1\\

x-y-z=2\\

x-y+z=3

\end{cases}\

$

$

\left\{ \begin{array}{ccc}

x& &+z=1\\

x&-y&-z=2\\

x&-y&+z=3

\end{array} \right.

$

$ \vmatrix a & b & c\\ b & e &d \\ a & n & s\endvmatrix $

$\begin{pmatrix}0 & 0 \\0 & 0 \end{pmatrix}$

$\begin{bmatrix}0 & 0 \\0 & 0 \end{bmatrix}$

$\begin{pmatrix}

3 & 6 &5\\

4 & 3 &5\\

3 & 5 &6

\end{pmatrix}$

$\begin{bmatrix}

3 & 6 &5\\

4 & 3 &5\\

3 & 5 &6

\end{bmatrix}$

$\begin{pmatrix}

3 & 6 &\cdots &5\\

4 & 3 &\cdots &5\\

\vdots &\vdots &\ddots &\vdots\\

3 & 5 &\cdots &6

\end{pmatrix}$

$\begin{pmatrix}[0]\_1 & [0]\_2^T \\

[0]\_2 & \begin{array}{cccc}

\eta\_{s} &\cdots &0\\

\vdots &\ddots &\vdots\\

0 &\cdots &\eta\_r

\end{array} \end{pmatrix}$

$

\begin{bmatrix}[0]\_1 & [0]\_2^T \\

[0]\_2 & \begin{array}{cccc}

\eta\_{s} &\cdots &0\\

\vdots &\ddots &\vdots\\

0 &\cdots &\eta\_r

\end{array} \end{bmatrix}

$

$\begin{pmatrix}\begin{array}{ccc}

11 & \quad \quad& 22 \\ 33 &\qquad & 44

\end{array} & [0] & \begin{array}{cc}

55 \\ 66

\end{array}\\ [0]^T & 77 & 88\\ \begin{array}{cc}

99 & 12

\end{array} & 13 & 14\end{pmatrix}$

$\left[\begin{matrix}

a & b & c\\

d& e & f

\end{matrix} \left|\,\begin{matrix}

0\\

0

\end{matrix}\right.\right]$

\begin{equation}

\bar{A}\_v= \begin{pmatrix}[0]\_1 & [0]\_2^T \\

[0]\_2 & \begin{array}{cccc}

\eta\_{s} &\cdots &0\\

\vdots &\ddots &\vdots\\

0 &\cdots &\eta\_r

\end{array} \end{pmatrix}, \label{}

\end{equation}

$$

\bar{A}=\left[\begin{array}{ccccc}

a\_{11} & a\_{12} & \ldots & a\_{1 n} & a\_{1} \\

a\_{21} & a\_{22} & \ldots & a\_{2 n} & a\_{2} \\

\vdots & \vdots & \ddots & \vdots & \vdots \\

a\_{n 1} & a\_{n 2} & \ldots & a\_{n n} & a\_{n} \\

a\_{1} & a\_{2} & \ldots & a\_{n} & a\_{0}

\end{array}\right].

$$

$$

A=\left[\begin{array}{cccccccc}

A\_{1} & 0 & \ldots & \ldots & \ldots & \ldots & \ldots & \ldots \\

0 & A\_{2} & 0 & \ldots & \ldots & \ldots & \ldots & \ldots \\

\ldots & \ldots & \ldots & \ldots & \ldots & \ldots & \ldots & \ldots \\

0 & \ldots & 0 & A\_{k} & 0 & \ldots & \ldots & \ldots \\

0 & \ldots & \ldots & 0 & B\_{1} & 0 & \ldots & \ldots \\

\ldots & \ldots & \ldots & \ldots & 0 & B\_{2} & 0 & \ldots \\

\ldots & \ldots & \ldots & \ldots & \ldots & \ldots & \ldots & \ldots \\

0 & \ldots & \ldots & \ldots & \ldots & \ldots & 0 & B\_{l}

\end{array}\right]

$$

$$

A=\left[\begin{array}{ccccccc}

1 & 0 & \ldots & 0 & 0 & \ldots & 0 \\

0 & 1 & \ldots & 0 & 0 & \ldots & 0 \\

\vdots & \vdots & \ddots & \vdots & \vdots & \ddots & \vdots \\

0 & 0 & \ldots & 1 & 0 & \ldots & 0 \\

0 & 0 & \ldots & 0 & -1 & \ldots & 0 \\

\vdots & \vdots & \ddots & \vdots & \vdots & \ddots & \vdots \\

0 & 0 & \ldots & 0 & 0 & \ldots & -1

\end{array}\right]

$$