

$$\begin{aligned}
y_1 &= a_{11}x_1 + a_{12}x_2 + a_{13}x_3 + \dots + a_{1(n-1)}x_{n-1} + a_{1n}x_n \\
y_2 &= a_{21}x_1 + a_{22}x_2 + a_{23}x_3 + \dots + a_{2(n-1)}x_{n-1} + a_{2n}x_n \\
\vdots &= \vdots + \vdots + \vdots + \vdots + \vdots + \vdots \\
y_{n-1} &= a_{(n-1)1}x_1 + a_{(n-1)2}x_2 + a_{(n-1)3}x_3 + \dots + a_{(n-1)(n-1)}x_{n-1} + a_{(n-1)n}x_n \\
y_n &= a_{n1}x_1 + a_{n2}x_2 + a_{n3}x_3 + \dots + a_{(n)(n-1)}x_{n-1} + a_{nn}x_n
\end{aligned}$$