

$$\begin{pmatrix}
 4 & -1 & 0 & -1 & 0 & 0 & & & \\
 -1 & 4 & -1 & 0 & -1 & 0 & & & \\
 0 & -1 & 4 & 0 & 0 & -1 & & & \\
 \hline
 -1 & 0 & 0 & 4 & -1 & 0 & -1 & 0 & 0 \\
 0 & -1 & 0 & -1 & 4 & -1 & 0 & -1 & 0 \\
 0 & 0 & -1 & 0 & -1 & 4 & 0 & 0 & -1 \\
 \hline
 & & & -1 & 0 & 0 & 4 & -1 & 0 \\
 0 & & & 0 & -1 & 0 & -1 & 4 & -1 \\
 & & & 0 & 0 & -1 & 0 & -1 & 4
 \end{pmatrix}
 \begin{pmatrix}
 u_{1,1} \\
 u_{2,1} \\
 u_{3,1} \\
 u_{1,2} \\
 u_{2,2} \\
 u_{3,2} \\
 u_{1,3} \\
 u_{2,3} \\
 u_{3,3}
 \end{pmatrix}
 =
 \begin{pmatrix}
 g(0, \frac{1}{4}) + g(\frac{1}{4}, 0) + h^2 f(x_1, y_1) \\
 g(\frac{1}{2}, 0) + h^2 f(x_2, y_1) \\
 g(1, \frac{1}{4}) + g(\frac{3}{4}, 0) + h^2 f(x_3, y_1) \\
 g(0, \frac{1}{2}) + h^2 f(x_1, y_2) \\
 h^2 f(x_2, y_2) \\
 g(1, \frac{1}{2}) + h^2 f(x_3, y_2) \\
 g(0, \frac{3}{4}) + g(\frac{1}{4}, 1) + h^2 f(x_1, y_3) \\
 g(\frac{1}{2}, 1) + h^2 f(x_2, y_3) \\
 g(1, \frac{3}{4}) + g(\frac{3}{4}, 1) + h^2 f(x_3, y_3)
 \end{pmatrix}$$