Perform Gaussian elimination with row swapping (row pivoting):

i	L_i	$\tilde{P}$	A	p
0			$\begin{array}{\|c\|ccc} \hline 0 & 4 & -2 \\ \hline 4 & 8 & 6 \\ 6 & -4 & 2 \end{array}$	$\begin{array}{c} \\ \\ \hline . \\ . \end{array}$
	$\begin{array}{\|cc} \hline \multicolumn{2}{c}{} \\ \hline \multicolumn{2}{c}{} \end{array}$		$\begin{array}{\|cc} \hline \multicolumn{2}{c}{} \\ \hline \multicolumn{2}{c}{} \end{array}$	$\begin{array}{c} \\ \\ \hline . \\ . \end{array}$
1		$\begin{array}{\|cc} \hline \multicolumn{2}{c}{} \\ \hline \multicolumn{2}{c}{} \end{array}$	$\begin{array}{\|cc} \hline \multicolumn{2}{c}{} \\ \hline \multicolumn{2}{c}{} \end{array}$	$\begin{array}{c} \\ \hline . \end{array}$
	$\begin{array}{\|cc} \hline \multicolumn{2}{c}{} \\ \hline \multicolumn{2}{c}{} \end{array}$		$\begin{array}{\|cc} \hline \multicolumn{2}{c}{} \\ \hline \multicolumn{2}{c}{} \end{array}$	$\begin{array}{c} \\ \hline \\ . \end{array}$
2			$\begin{array}{\|cc} \cline{2-2} & \multicolumn{1}{c\|}{} \\ \hline \multicolumn{2}{c}{} \end{array}$	$\begin{array}{c} \\ \hline \end{array}$