

$$\Rightarrow \begin{array}{cccc} 1 & -1 & -1 & 2 \end{array}$$

$$\begin{array}{cccc} 0 & 0 & 5 & 10 \end{array}$$

$$\begin{array}{cccc} 2 & -1 & 1 & 9 \end{array}$$

$$\Rightarrow \begin{array}{cccc} 1 & -1 & -1 & 2 \end{array}$$

$$\begin{array}{cccc} 0 & 0 & 5 & 10 \end{array}$$

$$\begin{array}{cccc} 0 & 1 & 3 & 5 \end{array}$$

$$\Rightarrow \begin{array}{cccc} 1 & -1 & -1 & 2 \end{array}$$

$$\begin{array}{cccc} 0 & 1 & 3 & 5 \end{array}$$

$$\begin{array}{cccc} 0 & 0 & 5 & 10 \end{array}$$

\Rightarrow Easier to solve.

2.2 Direct methods for solving linear systems