

## EXERCISES OF SECTIONS 2.5

**Question 1.** For what value(s) of  $k$ , does

$$\begin{bmatrix} 1 & 0 & 1 & \vdots & 0 \\ 1 & 2 & k & \vdots & 0 \\ k & k & 6 & \vdots & k+4 \end{bmatrix}$$

have a unique solution? infinitely many solutions? no solution?