Let $\alpha = \begin{pmatrix} 1 & 1 \\ 0 & 1 \end{pmatrix}$. Then $\alpha^{-1}R\alpha$ consists of the matrices

$$\begin{pmatrix} 1 & -1 \\ 0 & 1 \end{pmatrix}\begin{pmatrix} x & 0 \\ y & z \end{pmatrix}\begin{pmatrix} 1 & 1 \\ 0 & 1 \end{pmatrix} = \begin{pmatrix} x-y & x-y-z \\ y & y+z \end{pmatrix}$$

We see easily that the set of these matrices is exactly A. Therefore, A is just a “conjugate” of the subring R in the ring M2(k). In particular, $A \sim R$.