Consider any nonzero element $b \in A$, and let $a_{n} b^{n}+\ldots+a_{m} b^{m}=0\left(a_{i} \in k, a_{n} \neq 0 \neq a_{m}, n \geq m\right)$ be a polynomial of smallest degree satisfied by $b$. If $m>0$, then $c=a_{n} b^{n-1}+\ldots+a_{m} b^{m-1} \neq 0$, and we have $c b=b c=0$. In this case, $b$ is both a left 0 -divisor and a right 0 -divisor. If $m=0$, then, for $d=a_{n} b^{n-1}+\ldots+a_{1}$ we have $d b=b d=$ $-a_{0} \in k^{*}$. In this case, $b$ is a unit in $A$.

