Name $\qquad$

Suppose $A$ is a $7 \times 7$ matrix that is invertible. Which of the following are true?

T or F 1) In Row Reduced Echelon form, $A$ has 7 pivots.
Tor F2) $\lambda=0$ is not an eigenvalue.
T or F 3 ) The matrix equation $A \vec{x}=\overrightarrow{0}$ has a unique solution.
T or F 4 ) The matrix equation $A \vec{x}=\vec{b}$ has a unique solution for every $\vec{b} \in \mathbb{R}^{7}$.
T or F5) $|A| \neq 0$.
6) Given the matrix below, find its eigenvalues.

$$
A=\left[\begin{array}{ll}
0 & 2 \\
0 & 1
\end{array}\right]
$$

