Elementary Linear Algebra - MATH 2250 - Quiz 21

Name:

1. [T] [F] If λ is an eigenvalue of A and μ is an eigenvalue of B then $\lambda + \mu$ is an eigenvalue of $A + B$.
2. If A is singular then one of its eigenvalues is _____.
3. If P is a nonzero projection matrix in $\mathbb{R}^3$, then two of its eigenvalues are _____, and _____.
4. If λ is an eigenvalue of A, then $A - \lambda I$ is a(n) _____ matrix.
5. What is the sum of the eigenvalues of $\begin{bmatrix} 1 & 1 & 1 \\ 1 & 2 & 3 \\ 1 & 3 & 6 \end{bmatrix}$?