Elementary Linear Algebra - MATH 2250 - Quiz 17

Name:

1. [T] [F] $\det(A+B) = \det(A) + \det(B)$, for any two matrices A and B.
2. [T] [F] $\det(cA) = c\det(A)$, for any real number c and any matrix A.
3. [T] [F] $\det(A) = 0$, if and only if $A = O$, the zero matrix.
4. [T] [F] $\det(P) = 1$, for any permutation matrix P.
5. [T] [F] $\det(AB) = \det(A)\det(B)$, for any two matrices A and B.
6. [T] [F] $\det(A^{-1}) = \det(A)$.
7. Evaluate $\begin{vmatrix} 1 & 1 & 1 \\ 1 & 1 & 2 \\ 1 & 2 & 3 \end{vmatrix}$.