2018 Fall EECS205002 Linear Algebra

Name: ID:

2018/10/24 Quiz 3

1. Compute $\det(A)$. The blank means 0. (Hint: you can use any row/column to perform cofactor expansion.)

$$A = \begin{bmatrix} o & m & n & & p & \\ & & s & & q & \\ h & j & i & l & & k \\ u & & t & & v & \\ & & & & w & \\ e & c & & a & f & b \end{bmatrix},$$

2. Let $C = \begin{bmatrix} A & O \\ O & B \end{bmatrix}$, where A, B, and C are square matrices, and O means zero a matrix. Show that $\det(C)=\det(A)\det(B)$.