HOMEWORK 7

Exercise 1. Let

$$A = \begin{pmatrix} a & b \\ c & d \end{pmatrix}$$

Show that if $\det(A) \neq 0$, then

$$B = \frac{1}{\det(A)} \begin{pmatrix} d & -b \\ -c & a \end{pmatrix}$$

is the inverse of A, where $\det(A) = ad - bc$ is the determinant of A.