

Math 320 Linear Algebra Assignment # 2

- Let $A = \begin{bmatrix} 2 & 3 \\ -1 & 2 \end{bmatrix}$ and $B = \begin{bmatrix} -3 & 1 \\ -2 & -2 \end{bmatrix}$. Find the following:
 - $\det(A)$
 - $\det(B)$
 - AB
 - $\det(AB)$
 - Show $\det(A)\det(B) = \det(AB)$.
- Suppose that A is an $n \times n$ matrix. Show that if $A^2 = I_n$ then $\det(A) = \pm 1$.